

**AD-A221 805**



**Research Product 90-10b**

# **Task Analysis of the CH-47D Mission and Decision Rules for Developing a CH-47D Workload Prediction Model**

**Volume II: Appendixes F through I**

**Carl R. Bierbaum and Theodore B. Aldrich**  
Anacapa Sciences, Inc.

*Handwritten:* S. J. [unclear]  
[unclear]  
[unclear]

**February 1990**

**Aviation R & D Activity at Fort Rucker, Alabama  
Systems Research Laboratory**

**U.S. Army Research Institute for the Behavioral and Social Sciences**

Approved for public release; distribution is unlimited.

90

# U.S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES

A Field Operating Agency Under the Jurisdiction  
of the Deputy Chief of Staff for Personnel

**EDGAR M. JOHNSON**  
Technical Director

**JON W. BLADES**  
COL, IN  
Commanding

Research accomplished under contract for  
the Department of the Army

Anacapa Sciences, Inc.

Technical review by

Charles A. Gainer  
Gabriel P. Intano  
Raymond C. Sidovsky  
Paul J. Tremont

Accession For	
NTIS	<input checked="checked" type="checkbox"/>
DTIC	<input type="checkbox"/>
Unpublished	<input type="checkbox"/>
Other	<input type="checkbox"/>
By	
File	
At	
Date	
A-1	



## NOTICES

**DISTRIBUTION:** Primary distribution of this report has been made by ARI. Please address correspondence concerning distribution of reports to: U.S. Army Research Institute for the Behavioral and Social Sciences, ATTN: PERI-POX, 5001 Eisenhower Ave., Alexandria, Virginia 22333-5600.

**FINAL DISPOSITION:** This report may be destroyed when it is no longer needed. Please do not return it to the U.S. Army Research Institute for the Behavioral and Social Sciences.

**NOTE:** The findings in this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

**Research Product 90-10b**

**Task Analysis of the CH-47D Mission and  
Decision Rules for Developing a CH-47D  
Workload Prediction Model**

**Volume II: Appendixes F through I**

**Carl L. Bierbaum and Theodore B. Aldrich**  
Anacapa Sciences, Inc.

**Aviation R & D Activity at Fort Rucker, Alabama**  
**Charles A. Gainer, Chief**

**Systems Research Laboratory**  
**Robin L. Keesee, Director**

**U.S. Army Research Institute for the Behavioral and Social Sciences**  
**5001 Eisenhower Avenue, Alexandria, Virginia 22333-5600**

**Office, Deputy Chief of Staff for Personnel**  
**Department of the Army**

**February 1990**

---

**Army Project Number**  
**2Q263007A793**

**Human Factors in Training and**  
**Operational Effectiveness**

Approved for public release; distribution is unlimited.

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

## REPORT DOCUMENTATION PAGE

Form Approved  
OMB No. 0704-0188

1a. REPORT SECURITY CLASSIFICATION Unclassified			1b. RESTRICTIVE MARKINGS --		
2a. SECURITY CLASSIFICATION AUTHORITY --			3. DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release; distribution is unlimited.		
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE --					
4. PERFORMING ORGANIZATION REPORT NUMBER(S) ASI690-318(II)-88			5. MONITORING ORGANIZATION REPORT NUMBER(S) ARI Research Product 90-10b		
6a. NAME OF PERFORMING ORGANIZATION Anacapa Sciences, Inc.		6b. OFFICE SYMBOL (If applicable) --		7a. NAME OF MONITORING ORGANIZATION U.S. Army Research Institute Aviation Research and Development Activity	
6c. ADDRESS (City, State, and ZIP Code) P.O. Box 489 Fort Rucker, AL 36362-5000			7b. ADDRESS (City, State, and ZIP Code) ATTN: PERI-IR Fort Rucker, AL 36362-5354		
8a. NAME OF FUNDING/SPONSORING ORGANIZATION U.S. Army Research Institute for the Behavioral and Social Sciences		8b. OFFICE SYMBOL (If applicable) PERI-I		9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER MDA903-87-C-0523	
8c. ADDRESS (City, State, and ZIP Code) 5001 Eisenhower Avenue Alexandria, VA 22333-5600			10. SOURCE OF FUNDING NUMBERS		
PROGRAM ELEMENT NO.		PROJECT NO.		TASK NO.	
63007		A793		1210	
			WORK UNIT ACCESSION NO. C6		
11. TITLE (Include Security Classification) Task Analysis of the CH-47D Mission and Decision Rules for Developing a CH-47D Workload Prediction Model. Volume II: Appendixes F--I					
12. PERSONAL AUTHOR(S) Bierbaum, Carl R., and Aldrich, Theodore B. (Anacapa Sciences)					
13a. TYPE OF REPORT Interim		13b. TIME COVERED FROM 87/12 TO 88/12		14. DATE OF REPORT (Year, Month, Day) 1990, February	
15. PAGE COUNT					
16. SUPPLEMENTARY NOTATION All research on this project was technically monitored by Mr. Charles A. Gainer, Chief, U.S. Army Research Institute Aviation Research and Development Activity (ARIARDA), Fort Rucker, AL.					
17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)		
FIELD	GROUP	SUB-GROUP	Mission analysis, Aviation workload		
05	08		Task analysis, Modeling		
			Man-machine interface		
19. ABSTRACT (Continue on reverse if necessary and identify by block number) A mission scenario was used to conduct a comprehensive task analysis for CH-47D operations. The analysis used a top-down approach to identify the phases, functions, and tasks for the mission. Nine phases, 37 segments, 66 functions, and 154 tasks were identi- fied. The crewmember performing each task was identified and estimates of the sensory, cognitive, and psychomotor workload associated with the tasks were derived. Estimates of the task times also were derived. The mission/task/workload analysis data were used to develop a computer model of work- load for CH-47D crewmembers. The model used a bottom-up approach to build mission functions from tasks and mission segments from functions. Decision rules were written to specify the procedure for combining the tasks into functions and the functions into segments. The model permitted an analysis of total workload experienced by each crewmember in the performance of both sequential and concurrent tasks.					
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT <input type="checkbox"/> UNCLASSIFIED/UNLIMITED <input checked="" type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS			21. ABSTRACT SECURITY CLASSIFICATION Unclassified		
22a. NAME OF RESPONSIBLE INDIVIDUAL Charles A. Gainer			22b. TELEPHONE (Include Area Code) (205) 255-4404		22c. OFFICE SYMBOL PERI-IR



## FOREWORD

---

The Army Research Institute Aviation Research and Development Activity (ARIARDA) at Fort Rucker, Alabama, is an operational unit of the Training Research Laboratory and provides research support in aircrew training to the U.S. Army Aviation Center (USAAVNC). Research is conducted in-house and is augmented by onsite contract support. This report documents contract work performed by ARIARDA in support of the Special Operations Aircraft (SOA) Program Manager (PM) Office at the Army Aviation Systems Command (AVSCOM).

The potential impact that advanced technology will have on manpower and personnel requirements must be considered during the early stages of planning for system modifications. One critical consideration is the impact that advanced technology will have on the workload of the system operator(s). Since operator overload can result in a dramatic decrease in system effectiveness, it is imperative that operator workload be considered throughout the system modification process.

This report describes the methods used to conduct a comprehensive task analysis of the CH-47D mission. Information provided by the CH-47D mission/task/workload analysis was used to establish a database for developing a computer model that predicts workload for the CH-47D pilot and copilot. Assessments of workload produced by the model provide a baseline for evaluating the workload impact of any high technology modifications or product improvements.

The report consists of two volumes. Volume I describes the methods for conducting the research and contains Appendixes A through E. Volume II contains function and segment summary worksheets and decision rules, Appendixes F through I.

Appendixes A through E, presented in Volume I, summarize the results of the CH-47D baseline mission/task/workload analysis. The following specific information is presented in each of these appendixes:

- . Appendix A summarizes the segments in each mission phase;
- . Appendix B presents an alphabetical list of the unique mission functions;
- . Appendix C summarizes the functions in each mission segment;
- . Appendix D presents an alphabetical list of the unique tasks; and

- . Appendix E presents Function Analysis Worksheets that summarize the workload data derived for each unique function.

The information presented in Volume I comprises a comprehensive task database for developing the CH-47D workload prediction model.

Volume II of the report contains Appendixes F through I. The following information is presented in each of the appendixes:

- . Appendix F presents the Function Summary Worksheets,
- . Appendix G presents the Function Decision Rules,
- . Appendix H presents the Segment Summary Worksheets, and
- . Appendix I presents the Segment Decision Rules.

The Function Decision Rules provide directions for building functions from the tasks identified in the analysis and the Segment Decision Rules provide directions for building mission segments from the functions.

Comments or questions about the research should be directed to Mr. Charles A. Gainer at the following address:

Chief  
ARI Aviation Research and Development Activity  
ATTN; PERI-IR (Mr. Charles A. Gainer)  
Fort Rucker, Alabama 36362-5354



EDGAR M. JOHNSON  
Technical Director

## ACKNOWLEDGMENTS

---

The authors wish to express their appreciation to the following individuals for their contributions to this research effort.

Chief Warrant Officer, W4 Marty L. Anderson, Flight Standardization Division, Directorate of Evaluation and Standardization, and Chief Warrant Officer, W4 Ronald E. Newsome, Cargo Utility Systems Branch, Aviation Division, Department of Gunnery and Flight Systems, served as subject matter experts (SMEs) for the review of the mission task analysis. The baseline task analysis required in-depth knowledge of the cockpit configuration for both crewmembers of the CH-47D aircraft. The SMEs' knowledge of the specific tasks performed by the pilot and copilot in the conduct of their mission contributed greatly to the success of the task analysis. Ms. Cassandra Hocutt, Anacapa Sciences, Inc., spent many hours developing the task analysis/workload (TAWL) software system to provide for easy entering and management of the mission/task/workload database and the CH-47D workload prediction model. The authors especially thank Ms. Nadine McCollim for the speed and accuracy in typing the numerous revisions of the task analysis. Her work significantly enhanced the quality of the final product.

TASK ANALYSIS OF THE CH-47D MISSION AND DECISION RULES FOR  
DEVELOPING A CH-47D WORKLOAD PREDICTION MODEL. VOLUME II:  
APPENDIXES F THROUGH I

CONTENTS

---

	Page
APPENDIX F. CH-47D FUNCTION SUMMARY WORKSHEETS . . . . .	F-1
G. CH-47D FUNCTION DECISION RULES WORKSHEETS . . . . .	G-1
H. CH-47D SEGMENT SUMMARY WORKSHEETS . . . . .	H-1
I. CH-47D SEGMENT DECISION RULES WORKSHEETS . . . . .	I-1

## APPENDIX F

### CH-47D FUNCTION SUMMARY WORKSHEETS

This appendix contains the Function Summary Worksheets for each of the 66 functions. The summary worksheets identify and list the tasks to be performed by the pilot and copilot. For each crewmember, separate columns are used to identify discrete fixed, discrete random, and continuous tasks. The spatial arrangement of the tasks on the worksheet corresponds roughly to the temporal sequence of the tasks.

# CH-47 FUNCTION SUMMARY WORKSHEET

2

## FUNCTION 01 Adjust Flight Parameters

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Control Attitude (026)			
	Adjust Attitude (018)			
	Control Airspeed (012)			
	Adjust Power (123)			
	Adjust Heading (080)			
	Adjust Trim (146)			
	Maintain Obstacle Clearance (115)			

## FUNCTION 02    Adjust Flight Parameters [NVG]

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Control Attitude [NVG] (028)			
	Adjust Attitude [NVG] (022)			
	Control Airspeed [NVG] (016)			
	Adjust Power [NVG] (126)			
	Adjust Heading [NVG] (085)			
	Adjust Trim [NVG] (148)			
	Maintain Obstacle Clearance [NVG] (117)			

## FUNCTION 03    Check Aircraft Systems (Pilot)

PILOT				COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Check Engine Instruments (064)  Check MASTER CAUTION/WARNING Panel (105)  Check Fuel Quantity Indicator (076)		Monitor Flight Controls (154)			



## FUNCTION 04

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Check Fuel Quantity Indicator (076) Check Fuel Flow Indicator (075) Note Time (142) Compute Burnout (032)	

# CH-47 FUNCTION SUMMARY WORKSHEET

6

## FUNCTION 05 Establish Approach

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Check % TRQ Indicator (Inflight) (153)				
Adjust Power (123)				
Check % TRQ Indicator (Inflight) (153)				

# CH-47 FUNCTION SUMMARY WORKSHEET

7

## FUNCTION 06 Establish Approach [NVG]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Check % TRQ Indicator (Inflight) (153)					
Adjust Power [NVG] (126)					
Check % TRQ Indicator (Inflight) (153)					

# CH-47 FUNCTION SUMMARY WORKSHEET

8

## FUNCTION 07 Establish Climb

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Check % TRQ Indicator (Inflight) (153)  Adjust Power (123)  Check % TRQ Indicator (Inflight) (153)					



## FUNCTION 09      Establish Level of Flight

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Adjust Attitude (025) Check % TRQ Indicator (Inflight) (153) Adjust Power (123) Check % TRQ Indicator (Inflight) (153)					

## FUNCTION 10 Establish Level of Flight [NVG]

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
Adjust Attitude [NVG] (027)			
Check % TRQ Indicator (Inflight) (153)			
Adjust Power [NVG] (126)			
Check % TRQ Indicator (Inflight) (153)			

## CH-47 FUNCTION SUMMARY WORKSHEET

12

## FUNCTION 11 Land Aircraft

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Perform Touchdown (143)	Maintain Obstacle Clearance (115)			Check Obstacle Clearance (114)
	Adjust Power (123)			
	Control Altitude (026)			
	Control Heading (081)			
	Control Drift (062)			



## FUNCTION 12

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)
Perform Touchdown [NVG] (144)	Maintain Obstacle Clearance [NVG] (117)		Check Obstacle Clearance [NVG] (116)
	Adjust Power [NVG] (126)		
	Control Attitude [NVG] (028)		
	Control Heading [NVG] (086)		
	Control Drift [NVG] (063)		

## FUNCTION 13 Load Aircraft (Internal)

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
			Monitor Loading (095) Verify Load Secure (094) Transmit Communication (Crewchief) (038) Receive Communication (Crewchief) (037)		

## FUNCTION 14 Load Cargo (External)

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
Check % TRQ Indicator (Inflight) (153)		Set Cargo Hook Master Switch (033)	
Adjust Power (123)		Set Hook Select Switch (089)	
Check % TRQ Indicator (Inflight) (153)			
	Control Altitude (019)		
	Control Altitude (026)		
	Control Heading (081)		
	Control Drift (062)		
	Receive Communication (Crewchief) (037)	Verify Load Hook-up (090)	

## CH-47 FUNCTION SUMMARY WORKSHEET

16

## FUNCTION 15 Load Cargo (External) [NVG]

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Check % TRQ Indicator (Inflight) (153)			Set Cargo Hook Master Switch (033)	
Adjust Power [NVG] (126)			Set Hook Select Switch (089)	
Check % TRQ Indicator (Inflight) (153)				
	Receive Communication (Crewchief) (037)			
	Control Altitude [NVG] (023)			
	Control Altitude [NVG] (028)			
	Control Heading [NVG] (086)			
	Control Drift [NVG] (063)		Verify Load Hook-up (090)	

## FUNCTION 16      Mission Change

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Note Message Alert (110) Set Transmitter Selector Switch (145) Transmit Acknowledgment (002) Copy Coordinates (042) Transmit Acknowledgment (002) Check Coordinates (041) Check Route (135)	

## FUNCTION 17    Monitor Audio

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
		Monitor Audio (029)			Monitor Audio (029)

## FUNCTION 18

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Check Direction Display (050)		Monitor Flight Controls (154)			

## FUNCTION 19 Perform After Landing Check

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
		Neutralize Flight Controls (068)	Set AFCS SEL Switch (007) Set Swivel Switch (137) Set Master Switch Transponder (106) Check Cyclic Trim Indicator (047)		



## FUNCTION 20 Perform Before Hover Check

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Perform HIT Check (087)			Set Swivel Switch (137)		
Check Rotor RPM (134)			Set AFCS SEL Switch (007)		

**FUNCTION 21** Perform Before Landing Check

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Check Rotor RPM (134)	
			Check Engine Instruments (064)	
			Check Fuel Quantity Indicator (076)	
			Check Master CAUTION/WARNING PANEL (105)	
			Check Radios (127)	
			Check Park Brake (118)	
			Set Countermeasure Switch (043)	
			Set Flare Dispenser Switch (067)	
			Set AFCS HDG Switch (006)	
			Set AFCS ALT Switch (003)	

## FUNCTION 21 Perform Before Landing Check [Continued]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
			Check Cyclic Trim Switch (048) Check Swivel Switch (136) Check Crew (046) Receive Communication (Crewchief) (037)		

**FUNCTION 22      Perform Before Landing Check (LZ)**

<b>PILOT</b>			<b>COPILOT</b>	
<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>	<b>CONTINUOUS</b>	<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>
			Check Rotor RPM (134) Check Engine Instruments (064) Check Fuel Quantity Indicator (076) Check Master CAUTION/WARNING PANEL (105) Check Radios (127) Check Park Brake (118) Set Countermeasure Switch (043) Set Flare Dispenser Switch (067) Set AFCS HDG Switch (006) Set AFCS ALT Switch (003)	

## FUNCTION 22 Perform Before Landing Check (LZ) [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Check Cyclic Trim Switch (048) Check Swivel Switch (136) Check Load Secure (093) Receive Communication (Crewchief) (037)	

## FUNCTION 23 Perform Before Takeoff Check

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Check Engine Instruments (064)			Check Fuel Quantity Indicator (076)		
Check Master Caution/Warning Panel (105)			Check Engine Instruments (064)		
			Check Master CAUTION/WARNING Panel (105)		
			Set AFCS SEL Switch (007)		
			Set park Brake (120)		
			Check Cyclic Trim Switch (048)		
			Set Swivel Switch (137)		
			Set Master Switch (Transponder) (106)		
			Set Countermeasure Switch (043)		
			Set Flare Dispenser Switch (067)		
Continued...			Continued...		

## FUNCTION 23 Perform Before Takeoff Check [Continued]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Receive Communication (Crewchief) (037)			Check Crew (046) Receive Communication (Crewchief) (037) Check Radios (127)		

**FUNCTION 24**      Perform Before Taxi Check

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Release Park Brake (119)			Set Swivel Switch (137)	
			Set AFCS SEL Switch (007)	
			Check Cyclic Trim Indicator (047)	
			Transmit Communication (Crewchief) (038)	
			Receive Communication (Crewchief) (037)	
			Check Crew (046)	
			Receive Communication (Crewchief) (037)	
			Check Park Brake Light (122)	



## FUNCTION 25

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Receive Communication (Pilot) (039)			Transmit Communication (Copilot) (036)		
Transmit Communication (Pilot) (040)			Receive Communication (Copilot) (035)		

**FUNCTION 26**      **Perform Cockpit Communication (Pilot)**

PILOT				COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Transmit Communication (Pilot) (040)  Receive Communication (Pilot) (039)			Receive Communication (Copilot) (035)  Transmit Communication (Copilot) (036)		

## FUNCTION 27

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
			Set Transmitter Selector Switch (145)		
			Transmit Message (Brief) (109)		
			Receive Message (107)		
			Transmit Acknowledgment (002)		

## FUNCTION 28 Perform External Communication (Threat)

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Set Transmitter Selector Switch (145)	
			Set Doppler Display Selector Switch (055)	
			Set DEST DISP Thumbwheel (049)	
			Transmit Message (Brief) (109)	
			Receive Acknowledgment (001)	
			Transmit Message (108)	
			Receive Acknowledgment (001)	
			Set Doppler Display Selector Switch (055)	

## FUNCTION 29 Perform Hover

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Control Altitude (019) Control Altitude (026) Control Heading (081) Control Drift (062) Maintain Obstacle Clearance) (115)		Check Obstacle Clearance (114)

## FUNCTION 30 Perform Hover Check

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Check Flight Controls (Hover) (069)			Set AFCS SEL Switch (007)		
Check Engine Instruments (Hover) (065)					
Check Flight Instruments (Hover) (071)					
Perform AFCS Check (Hover) (004)					
Perform Power Check (Hover) (124)					

## FUNCTION 31 Perform Hover Check [NVG]

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)
Check Flight Controls (Hover) [NVG] (070)			
Check Engine Instruments (Hover) (065)			
Check Flight Instruments (Hover) (071)			
Perform AFCS Check (Hover) [NVG] (005)			Set AFCS SEL Switch (007)
Perform Power Check (Hover) (124)			

## FUNCTION 32 Perform Hover [NVG]

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Control Altitude [NVG] (023) Control Altitude [NVG] (028) Control Heading [NVG] (086) Control Drift [NVG] (063) Maintain Obstacle Clearance [NVG] (117)			Check Obstacle Clearance [NVG] (116)



## FUNCTION 33 Perform Navigation

PILOT				COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	
				Monitor Doppler Display (054) Read Maps (104) Follow Course (044)		

**FUNCTION 34**    Perform Navigation [NVG]

PILOT				COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	
				Monitor Doppler Display (054) Read Maps (104) Follow Course [NVG] (045)		

## FUNCTION 35 Perform Taxi

PILOT				COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	CONTINUOUS
	Control Forward Motion (Taxi) (073) Control Heading (Taxi) (082) Maintain Obstacle Clearance (115)			Check Obstacle Clearance (114)		

## FUNCTION 36 Perform Taxi [NVG]

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Control Forward Motion (Taxi) [NVG] (074) Control Heading (Taxi) [NVG] (083) Maintain Obstacle Clearance [NVG] (117)		Check Obstacle Clearance [NVG] (116)

**FUNCTION 37**      **Perform Taxiing Check**

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Check Brakes (Pilot) (031)			Check Brakes (Copilot) (030)  Check Power Steering (125)	

## Program Doppler

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Set Doppler Mode Switch (058)	
			Check Doppler Panel Lights (059)	
			Check Doppler Dim Switch (052)	
			Set Doppler Mode Switch (058)	
			Check Doppler Display (053)	
			Set Doppler Mode Switch (058)	
			Set Doppler Display Selector Switch (055)	
			Set DEST DISP Thumbwheel (049)	
			Press Doppler KYBD Key (056)	
			Press Doppler KYBD Key (056)	
			Continued...	

## FUNCTION 38 Program Doppler [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	CONTINUOUS
			Enter Doppler Spheroid Data (060)	
			Press Doppler KYBD Key (056)	
			Enter Doppler Magnetic Variation (057)	
			Press Doppler Data Entry Key (051)	
			Set Doppler Display Selector Switch (055)	
			Set DEST DISP Thumbwheel (049)	
			Press Doppler KYBD Key (056)	
			Press Doppler KYBD Key (056)	
			Enter Doppler Zone Data (061)	
			Press Doppler KYBD Key (056)	
			Continued...	

## FUNCTION 38 Program Doppler [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Enter UTM Coordinates (151)	
			Press Doppler Data Entry Key (051)	
			Set Doppler Display Selector Switch (055)	
			Set DEST DISP Thumbwheel (049)	
			Press Doppler KYBD Key (056)	
			Set DEST DISP Thumbwheel (049)	
			Press Doppler Data Entry Key (051)	
			Press Doppler KYBD Key (056)	
			Press Doppler KYBD Key (056)	
			Press Doppler KYBD Key (056)	
			Continued...	



## FUNCTION 38 Program Doppler [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Enter Doppler Magnetic Variation (057)	
			Press Doppler Data Entry Key (051)	
			Set Doppler Display Selector Switch (055)	
			Set DEST DISP Thumbwheel (049)	
			Press Doppler KYBD Key (056)	
			Set DEST DISP Thumbwheel (049)	
			Press Doppler Data Entry Key (051)	
			Press Doppler KYBD Key (056)	
			Press Doppler KYBD Key (056)	
			Press Doppler KYBD Key (056)	
			Continued...	

## FUNCTION 38 Program Doppler [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Enter UTM Coordinates (151)	
			Press Doppler Data Entry Key (051)	
			Set Doppler Display Selector Switch (055)	
			Set DEST DISP Thumbwheel (049)	
			Press Doppler KYBD Key (056)	
			Set DEST DISP Thumbwheel (049)	
			Press Doppler Data Entry Key (051)	
			Press Doppler KYBD Key (056)	
			Press Doppler KYBD Key (056)	
			Press Doppler KYBD Key (056)	
			Continued...	

## FUNCTION 38 Program Doppler [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Enter Doppler Magnetic Variation (057)	
			Press Doppler Data Entry Key (051)	
			Set Doppler Display Selector Switch (055)	
			Set DEST DISP Thumbwheel (049)	
			Press Doppler KYBD Key (056)	
			Set DEST DISP Thumbwheel (049)	
			Press Doppler Data Entry Key (051)	
			Press Doppler KYBD Key (056)	
			Press Doppler KYBD Key (056)	
			Press Doppler KYBD Key (056)	
			Continued...	

## FUNCTION 38 Program Doppler [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Enter UTM Coordinates (151)	
			Press Doppler Data Entry Key (051)	
			Set Doppler Display Selector Switch (055)	
			Set DEST DISP Thumbwheel (049)	
			Press Doppler KYBD Key (056)	
			Set DEST DISP Thumbwheel (049)	
			Press Doppler Data Entry Key (051)	
			Press Doppler KYBD Key (056)	
			Press Doppler KYBD Key (056)	
			Press Doppler KYBD Key (056)	
			Continued...	

## FUNCTION 38 Program Doppler [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Enter Doppler Magnetic Variation (057)	
			Press Doppler Data Entry Key (051)	
			Set Doppler Display Selector Switch (055)	
			Set DEST DISP Thumbwheel (049)	
			Press Doppler KYBD Key (056)	
			Set DEST DISP Thumbwheel (049)	
			Press Doppler Data Entry Key (051)	
			Press Doppler KYBD Key (056)	
			Press Doppler KYBD Key (056)	
			Press Doppler KYBD Key (056)	
			Continued...	

## FUNCTION 38 Program Doppler [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Enter UTM Coordinates (151)	
			Press Doppler Data Entry Key (051)	
			Set Doppler Display Selector Switch (055)	
			Set DEST DISP Thumbwheel (049)	
			Press Doppler KYBD Key (056)	
			Set DEST DISP Thumbwheel (049)	
			Press Doppler Data Entry Key (051)	
			Press Doppler KYBD Key (056)	
			Press Doppler KYBD Key (056)	
			Press Doppler KYBD Key (056)	
			Continued...	

## FUNCTION 38 Program Doppler [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Enter Doppler Magnetic Variation (057)	
			Press Doppler Data Entry Key (051)	
			Set Doppler Display Selector Switch (055)	
			Set DEST DISP Thumbwheel (049)	
			Press Doppler KYBD Key (056)	
			Set DEST DISP Thumbwheel (049)	
			Press Doppler Data Entry Key (051)	
			Press Doppler KYBD Key (056)	
			Press Doppler KYBD Key (056)	
			Press Doppler KYBD Key (056)	
			Continued...	

## FUNCTION 38 Program Doppler [Continued]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
			Enter UTM Coordinates (151) Press Doppler Data Entry Key (051) Set FLY-TO-DEST Switch (072) Set Doppler Display Selector Switch (055) Press Doppler KYBD Key (056) Press Doppler Data Entry Key (051) Set FLY-TO-DEST Switch (072)		



## FUNCTION 39 Program Transponder

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Set Master Switch (Transponder) (106)	
			Set Mode 1 Code (111)	
			Set Mode 3A Code (112)	
			Check Test Light (139)	
			Check Test/MON Light (140)	
			Check Reply Light (133)	
			Set ANT Switch (024)	
			Set Master Switch (Transponder) (106)	
			Set M-1 Test Switch (097)	
			Set M-1 Switch (096)	
			Set M-2 Test Switch (099)	
			Set M-2 Switch (098)	
			Continued...	

## FUNCTION 39 Program Transponder [Continued]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
			Set M-3 Test Switch (101)		
			Set M-3 Switch (100)		
			Set M-C Test Switch (103)		
			Set M-C Switch (102)		
			Set ANT Switch (024)		
			Set M-1 Test Switch (097)		
			Set M-1 Switch (096)		
			Set M-2 Test Switch (099)		
			Set M-2 Switch (098)		
			Set M-3 Test Switch (101)		
			Set M-3 Switch (100)		
			Set M-C Test Switch (103)		
			Continued...		

**FUNCTION 39**      **Program Transponder [Continued]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM) CONTINUOUS
			Set M-C Switch (102)	
			Set ANT Switch (024)	
			Set M-1 Test Switch (097)	
			Set M-1 Switch (096)	
			Set M-2 Test Switch (099)	
			Set M-2 Switch (098)	
			Set M-3 Test Switch (101)	
			Set M-3 Switch (100)	
			Set M-C Test Switch (103)	
			Set M-C Switch (102)	
			Set Mode 4 Switch (113)	
			Set M-1 Switch (096)	
			Continued...	

## FUNCTION 39 Program Transponder [Continued]

PILOT				COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	
			Set M-2 Switch (098) Set M-3 Switch (100) Set M-C Switch (102)			

## FUNCTION 40    Refuel Aircraft

PILOT				COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Set Park Brake (120) Set Park Brake Lever (121)  Check Refueling Complete (132)	Check Fuel Quantity Indicator (076)			Check Fuel Quantity Indicator (076)	

## FUNCTION 41      Respond to Threat

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Detect Threat (141)	Perform Hard Turns (078) Change Altitude Sharply (020) Change Airspeed Quickly (014)		Detect Threat (141) Press Flare Dispenser Switch (066) Set Target Storage Switch (138)	

## FUNCTION 42 Respond to Threat [NVG]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Detect Threat (141)	Perform Hard Turns [NVG] (079) Change Altitude Sharply [NVG] (021) Change Airspeed Quickly [NVG] (015)		Detect Threat (141) Press Flare Dispenser Switch (066) Set Target Storage Switch (138)	

## CH-47 FUNCTION SUMMARY WORKSHEET

60

## FUNCTION 43    Unload Aircraft (Internal)

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
			Monitor Unloading (149) Verify Unloading Complete (150) Transmit Communication (Crewchief) (038) Receive Communication (Crewchief) (037)		



**FUNCTION 44      Unload Cargo (External)**

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Verify Load on Ground (091)  Press Cargo Release Button (034)  Check Hook Open Light (088)  Verify Load Released (092)				

## FUNCTION 45      Update Doppler (Landmark)

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Set DEST DISP Thumbwheel (049)	
			Set Doppler Display Selector Switch (055)	
			Press Doppler KYBD Key (056)	
			Read Maps (104)	
			Enter UTM Coordinates (151)	
			Read Maps (104)	
			Verify Aircraft Location (010)	
			Press Doppler Data Entry Key (051)	
			Set Doppler Display Selector Switch (055)	

## FUNCTION 46      Update Doppler (Landmark) [NVG]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
			Set DEST DISP Thumbwheel (049)		
			Set Doppler Display Selector Switch (055)		
			Press Doppler KYBD Key (056)		
			Read Maps (104)		
			Enter UTM Coordinates (151)		
			Read Maps (104)		
			Verify Aircraft Location [NVG] (011)		
			Press Doppler Data Entry Key (051)		
			Set Doppler Display Selector Switch (055)		

**FUNCTION 47**      **Update Doppler (Mission Change)**

<b>PILOT</b>			<b>COPLOT</b>	
<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>	<b>CONTINUOUS</b>	<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>
			Set Doppler Mode Switch (058)	
			Set Doppler Display Selector Switch (055)	
			Set DEST DISP Thumbwheel (049)	
			Press Doppler KYBD Key (056)	
			Press Doppler KYBD Key (056)	
			Enter Doppler Zone Data (061)	
			Press Doppler KYBD Key (056)	
			Enter UTM Coordinates (151)	
			Press Doppler Data Entry Key (051)	
			Set FLY-TO-DEST Switch (072)	
			Continued...	

## FUNCTION 4: Update Doppler (Mission Change) [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Set Doppler Display Selector Switch (055)	
			Set DEST DISP Thumbwheel (049)	
			Press Doppler KYBD Key (056)	
			Press Doppler KYBD Key (056)	
			Enter Doppler Spheroid Data (060)	
			Press Doppler KYBD Key (056)	
			Enter Doppler Magnetic Variation (057)	
			Check Doppler Display (053)	
			Set Doppler Display Selector Switch (055)	
			Set FLY-TO-DEST Switch (072)	

## FUNCTION 48      Update Doppler (PZ)

PILOT			COPLOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
			Press Doppler KYBD Key (056) Press Doppler Data Entry Key (051) Set FLY-TO-DEST Switch (072)		

**FUNCTION 49     Update Doppler (Stored Destination)**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Set Doppler Display Selector Switch (055) Read Maps (104) Verify Aircraft Location (010) Press Doppler KYBD Key (056) Press Doppler Data Entry Key (051) Set FLY-TO-DEST Switch (072)	

## FUNCTION 50      Update Doppler (Stored Destination) [NVG]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Set Doppler Display Selector Switch (055)  Read Maps (104)  Verify Aircraft Location [NVG] (011)  Press Doppler KYBD Key (056)  Press Doppler Data Entry Key (051)  Set FLY-TO-DEST Switch (072)	



## FUNCTION 51      Adjust Approach Parameters

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Control Attitude (026) Control Rate of Descent (130) Control Airspeed (012) Control Heading (080) Control Drift (062)			

## FUNCTION 52      Adjust Approach Parameters [NVG]

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Control Attitude [NVG] (028)			
	Control Rate of Descent [NVG] (131)			
	Control Airspeed [NVG] (016)			
	Control Heading [NVG] (086)			
	Control Drift [NVG] (063)			

**FUNCTION 53      Adjust Climb Parameters**

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Control Altitude (026)			
	Control Rate of Climb (128)			
	Control Airspeed (012)			
	Control Heading (080)			

**FUNCTION 54     Adjust Climb Parameters [NVG]**

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Control Attitude [NVG] (028)			
	Control Rate of Climb [NVG] (129)			
	Control Airspeed [NVG] (016)			
	Control Heading [NVG] (086)			

**FUNCTION 55     Adjust Level of Flight Parameters**

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Control Attitude (026) Control Attitude (019) Control Airspeed (012) Control Heading (081)			

## FUNCTION 56      Adjust Level of Flight Parameters [NVG]

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Control Altitude [NVG] (028)			
	Control Altitude [NVG] (023)			
	Control Airspeed [NVG] (016)			
	Control Heading [NVG] (086)			

## FUNCTION 57    Check Aircraft Systems (Ccpilot)

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
			Check Engine Instruments (064) Check MASTER CAUTION/WARNING Panel (105) Check Fuel Quantity Indicator (076)		

## FUNCTION 58 Check Approach Parameters

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Check Vertical Situation Indicator (Inflight) (152) Check Airspeed Indicator (Inflight) (013) Check Heading Indicator (Inflight) (084)			



# CH-47 FUNCTION SUMMARY WORKSHEET

77

## FUNCTION 59 Check Climb Parameters

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Check Vertical Situation Indicator (Inflight) (152)			
	Check Airspeed Indicator (Inflight) (013)			
	Check Heading Indicator (Inflight) (084)			

**FUNCTION 60      Check Flight Parameters**

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Check Altimeter (Inflight) (017)			
	Check Airspeed Indicator (Inflight) (013)			
	Check % TRQ Indicator (Inflight) (153)			
	Check Heading Indicator (Inflight) (084)			
	Check Trim Ball (Inflight) (147)			

## FUNCTION 61 Check Fuel Consumption Parameters

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
			Check Fuel Quantity Indicator (076) Note Time (142)		

## FUNCTION 62 Check Level of Flight Parameters

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Check Altimeter (Inflight) (017) Check Airspeed Indicator (Inflight) (013) Check Heading Indicator (Inflight) (084)				

## FUNCTION 63      Establish Hover

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Adjust Power (123) Check % TRQ Indicator (Inflight) (153)					

**FUNCTION 64      Establish Hover [NVG]**

PILOT				COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	
Adjust Power [NVG] (126) Check % TRQ Indicator (Inflight) (153)						

## FUNCTION 65      Monitor Threat (Copilot)

PILOT				COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	
			Check Direction Display (050)			

## FUNCTION 66 Monitor Flight Controls

PILOT				COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	
		Monitor Flight Controls (154)				



## APPENDIX G

### CH-47D FUNCTION DECISION RULES WORKSHEETS

Once the Function Summary Worksheets (see Appendix F) were completed for each function, decision rules were written to describe the exact manner in which the tasks must be combined to form the function. Decision rules for discrete fixed tasks and continuous tasks simply state the start time and the duration of the task on the function timeline. In addition to duration, the decision rules for discrete random tasks state the probability and/or frequency of the random task's occurrence within the function. This appendix contains the 66 function decision rules.

## FUNCTION 01    Adjust Flight Parameters

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Randomly select Tasks 012, 018, 026, 080, 115, 123, and 146 at .5-second intervals for the duration required for the segment.  Standby .5 second			

## FUNCTION 02    Adjust Flight Parameters [NVG]

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Randomly select Tasks 016, 022, 028, 085, 117, 126, and 148 at 1-second intervals for the duration required for the segment.  Standby .5 second		

## FUNCTION 03      Check Aircraft Systems (Pilot)

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 064 for 5 seconds Task 105 for 1 second Task 076 for 3 seconds Standby .5 second		Program Task 154 for the length of the function.			

## FUNCTION 04      Compute Fuel Burn Rate

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	CONTINUOUS
			Program in sequence, the following tasks (include a .5-second delay between tasks):  Task 076 for 3 seconds Task 075 for 3 seconds Task 142 for 7 seconds Task 032 for 30 seconds	

## FUNCTION 05 Establish Approach

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 153 for 1 second Task 123 for 1 second Task 153 for 1 second Standby .5 second				

## FUNCTION 06 Establish Approach [NVG]

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 153 for 1 second Task 126 for 2 seconds Task 153 for 1 second Standby .5 second				

## FUNCTION 07      Establish Climb

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 153 for 1 second Task 123 for 1 second Task 153 for 1 second Standby .5 second				



**FUNCTION 08      Establish Climb (NVG)**

				COPILOT		
PILOT						
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	
Program, in sequence, the following tasks (include a .5-second delay between tasks):						
Task 153 for 1 second						
Task 126 for 2 seconds						
Task 153 for 1 second						
Standby .5 second						

## FUNCTION 09      Establish Level of Flight

COPILOT			
PILOT			
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)
CONTINUOUS	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (RANDOM)
Program, in sequence, the following tasks (include a .5-second delay between tasks):			
Task 025 for 1 second			
Task 153 for 1 second			
Task 123 for 1 second			
Task 153 for 1 second			
Standby .5 second			

**FUNCTION 10**      Establish Level of Flight [NVG]

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 027 for 1 second Task 153 for 1 second Task 126 for 2 seconds Task 153 for 1 second Standby .5 second				

## FUNCTION 11    Land Aircraft

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
After 10 seconds, program Task 143 for 3 seconds.  Standby .5 second	Randomly alternate (.20 probability) Tasks 026, 062, 081, 115, and 123 at .5-second intervals. Continue for 9.5 seconds.			5 times during the first 10 seconds, randomly select Task 114. Task 114 lasts 1 second.	

## FUNCTION 12

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
<p>After 38.5 seconds, program Task 144 for 5 seconds.</p> <p>Standby .5 second</p>	<p>Randomly alternate (.20 probability) Tasks 028, 063, 086, 117, and 126 at 1-second intervals. Continue for 38 seconds.</p>		<p>7 times during the first 38 seconds, randomly select Task 116. Task 116 lasts 3 seconds.</p>

## FUNCTION 13 Load Aircraft (Internal)

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 095 for 60 seconds Task 094 for 5 seconds Task 038 for 3 seconds Task 037 for 3 seconds Standby .5 second	

## FUNCTION 14 Load Cargo (External)

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
3 seconds after Function 14 begins, program, in sequence, the following tasks (include a .5-second delay between tasks):			Program, in sequence, the following tasks (include a .5-second delay between tasks):		
Task 153 for 1 second			Task 033 for 1 second		
Task 123 for 1 second			Task 089 for 1 second		
Task 153 for 1 second					
	4.5 seconds after Function 14 begins, randomly select (.25 probability) Tasks 019, 026, 062, and 081 at .5-second intervals. Continue for 237 seconds.				
	8 times after Task 153 ends, insert Task 037 for 3 seconds. Task 037 does not interrupt other random tasks.		.5 second after random tasks end, program Task 090 for 1 second.		
			Standby .5 second		

## FUNCTION 15 Load Cargo (External) [NVG]

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
<p>Program, in sequence, the following tasks (include a .5-second delay between tasks):</p> <p>Task 153 for 1 second</p> <p>Task 126 for 2 seconds</p> <p>Task 153 for 1 second</p>	<p>5.5 seconds after Function 15 begins, randomly select (.25 probability) Tasks 023, 028, 063, and 086 at 1-second intervals. Continue for 335 seconds.</p> <p>8 times after Task 153 ends, insert Task 037 for 3 seconds. Task 037 does not interrupt other random tasks.</p>	<p>Program, in sequence, the following tasks (include a .5-second delay between tasks):</p> <p>Task 033 for 1 second</p> <p>Task 089 for 4 seconds</p> <p>.5 second after random tasks end, program Task 090 for 3 seconds.</p> <p>Standby .5 second</p>	CONTINUOUS



## FUNCTION 16 Mission Change

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Program, in sequence, the following tasks (include a .5-second delay between tasks):	
			Task 110 for 2 seconds	
			Task 145 for 1 second	
			Task 002 for 3 seconds	
			Task 042 for 12 seconds	
			Task 002 for 3 seconds	
			Task 041 for 10 seconds	
			Task 135 for 40 seconds	
			Standby .5 second	

## FUNCTION 17      Monitor Audio

PILOT				COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	
		Program Task 029 for the duration of the segment in which Function 17 occurs.				Program Task 029 for the duration of the segment in which Function 17 occurs.

**FUNCTION 18      Monitor Threat (Pilot)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Program Task 050 for 3 seconds.  Standby .5 second		Program Task 154 for the length of the function.			

## FUNCTION 19 Perform After Landing Check

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	CONTINUOUS
		Program Task 068 for the length of the function.	Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 007 for 2 seconds Task 137 for 1 second Task 106 for 2 seconds Task 047 for 1 second Standby .5 second	

## FUNCTION 20 Perform Before Hover Check

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
.5 second after Task 007 ends, program Task 134 for 2 seconds.  .5 second after Task 134 ends, program Task 087 for 180 seconds.  Standby .5 second			Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 137 for 2 seconds Task 007 for 2 seconds Standby .5 seconds		

## FUNCTION 21 Perform Before Landing Check

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Program, in sequence, the following tasks (include a .5-second delay between tasks):	
			Task 134 for 2 seconds	
			Task 064 for 5 seconds	
			Task 076 for 3 seconds	
			Task 105 for 1 second	
			Task 127 for 2 seconds	
			Task 118 for 7 seconds	
			Task 043 for 1 second	
			Task 067 for 1 second	
			Task 006 for 1 second	
			Task 003 for 1 second	
			Task 048 for 1 second	
			Task 136 for 1 second	
			Continued...	

**FUNCTION 21**    Perform Before Landing Check [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Task 046 for 3 seconds Task 037 for 3 seconds Standby .5 second	

**FUNCTION 22**    Perform Before Landing Check (LZ)

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 134 for 2 seconds Task 064 for 5 seconds Task 076 for 3 seconds Task 105 for 1 second Task 127 for 2 seconds Task 118 for 7 seconds Task 043 for 1 second Task 067 for 1 second Task 006 for 1 second Task 003 for 1 second Task 048 for 1 second Task 136 for 1 second  Continued...	



**FUNCTION 22**    Perform Before Landing Check (LZ) [Continued]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
			Task 093 for 3 seconds Task 037 for 3 seconds Standby .5 second		

## FUNCTION 23 Perform Before Takeoff Check

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 064 for 5 seconds  Task 105 for 1 second			Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 076 for 3 seconds  Task 064 for 5 seconds  Task 105 for 1 second  Task 007 for 2 seconds  Task 048 for 1 second  Task 120 for 1 second  Task 137 for 1 second  Task 106 for 1 second  Task 043 for 1 second  Task 067 for 1 second  Task 046 for 3 seconds  Task 037 for 3 seconds  Continued...	
Program Task 037 to occur when Task 037 occurs for the Copilot. Task 037 lasts 3 seconds.				

**FUNCTION 23      Perform Before Takeoff Check [Continued]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
			Task 127 for 2 seconds Standby .5 second		

## FUNCTION 24 Perform Before Taxi Check

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Program Task 119 for 1 second Standby .5 second			Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 137 for 2 seconds Task 007 for 2 seconds Task 047 for 1 second Task 038 for 3 seconds Task 037 for 3 seconds Task 046 for 3 seconds Task 037 for 3 seconds Task 122 for 1 second Standby .5 second		

**FUNCTION 25**      **Perform Cockpit Communication (Copilot)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 039 for 3 seconds Task 040 for 3 seconds Standby .5 second			Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 036 for 3 seconds Task 035 for 3 seconds Standby .5 second		

## FUNCTION 26 Perform Cockpit Communication (Pilot)

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	CONTINUOUS
Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 040 for 3 seconds Task 039 for 3 seconds Standby .5 second		Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 035 for 3 seconds Task 036 for 3 seconds Standby .5 second	

## FUNCTION 27

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 145 for 1 second Task 109 for 3 seconds Task 107 for 5 seconds Task 002 for 2 seconds Standby .5 second	

## FUNCTION 28 Perform External Communication (Threat)

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	CONTINUOUS
			Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 145 for 1 second Task 055 for 2 seconds Task 049 for 5 seconds Task 109 for 2 seconds Task 001 for 2 seconds Task 108 for 10 seconds Task 001 for 2 seconds Task 055 for 2 seconds Standby .5 second	



**FUNCTION 29**    Perform Hover

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Randomly select (.20 probability) Tasks 019, 026, 062, 081, and 115 at .5-second intervals. Continue for 30 seconds.  Standby .5 second			25 times during Function 29, randomly select Task 114. Task 114 lasts 1 second.	

## FUNCTION 30 Perform Hover Check

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	CONTINUOUS
Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 069 for 10 seconds Task 065 for 5 seconds Task 071 for 10 seconds Task 004 for 10 seconds Task 124 for 5 seconds		Program Task 007 for 2 seconds. Standby .5 second	

## FUNCTION 31 Perform Hover Check [NVG]

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
Program, in sequence, the following tasks (include a .5-second delay between tasks):		Program Task 007 for 2 seconds.	
Task 070 for 10 seconds		Standby .5 second	
Task 065 for 5 seconds			
Task 071 for 10 seconds			
Task 005 for 10 seconds			
Task 124 for 5 seconds			
Standby .5 second			

## FUNCTION 32 Perform Hover [NVG]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Randomly select (.20 probability) Tasks 023, 028, 063, 086, and 117 at .5-second intervals. Continue for 120 seconds.  Standby .5 second			35 times during Function 32, randomly select Task 116. Task 116 lasts 3 seconds.	

## FUNCTION 33 Perform Navigation

PILOT				COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
				Randomly select (.33 probability) Tasks 044, 054, or 104 for the duration of the segment in which Function 33 occurs. Tasks 044 and 054 last 4 seconds each; Task 104 lasts 10 seconds. Interrupt any ongoing task when the function ends.	

## FUNCTION 34 Perform Navigation [NVG]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
				Randomly select (.33 probability) Tasks 045, 054, or 104 for the duration of the segment in which Function 34 occurs. Tasks 045 and 054 last 4 seconds each; Task 104 lasts 10 seconds. Interrupt any ongoing task when the function ends.	

## FUNCTION 35 Perform Taxi

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Randomly select (.33 probability) Tasks 073 082, and 115 at .5-second intervals. Continue for 120 seconds.  Standby .5 second			25 times during Function 35, randomly select Task 114. Task 114 lasts 1 second.	

## FUNCTION 36 Perform Taxi [NVG]

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Randomly select (.33 probability) Tasks 074, 083, and 117 at .5-second intervals. Continue for 180 seconds.  Standby .5 second			30 times during Function 36, randomly select Task 116. Task 116 lasts 3 seconds.



## FUNCTION 37 Perform Taxi Check

PILOT		COPLOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
Program Task 031 for 5 seconds Standby .5 second		Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 030 for 5 seconds Task 125 for 10 seconds	

## FUNCTION 38 Program Doppler

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 058 for 1 second Task 059 for 2 seconds Task 052 for 5 seconds Task 058 for 1 second Task 053 for 18 seconds Task 058 for 1 second Task 055 for 2 seconds Task 049 for 5 seconds Task 056 for 1 second Task 056 for 1 second Task 060 for 10 seconds Task 056 for 1 second Continued...	

## FUNCTION 38 Program Doppler [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Task 057 for 10 seconds	
			Task 051 for 1 second	
			Task 055 for 2 seconds	
			Task 049 for 5 seconds	
			Task 056 for 1 second	
			Task 056 for 1 second	
			Task 061 for 8 seconds	
			Task 056 for 1 second	
			Task 151 for 12 seconds	
			Task 051 for 1 second	
			Task 055 for 2 seconds	
			Task 049 for 5 seconds	
			Task 056 for 1 second	
			Task 049 for 5 seconds	
			Task 051 for 1 second	
			Continued...	

## FUNCTION 38 Program Doppler [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Task 056 for 1 second	
			Task 056 for 1 second	
			Task 056 for 1 second	
			Task 057 for 10 seconds	
			Task 051 for 1 second	
			Task 055 for 2 seconds	
			Task 049 for 5 seconds	
			Task 056 for 1 second	
			Task 049 for 5 seconds	
			Task 051 for 1 second	
			Task 056 for 1 second	
			Task 056 for 1 second	
			Task 056 for 1 second	
			Task 151 for 12 seconds	
			Task 051 for 1 second	
			Continued...	

## FUNCTION 38 Program Doppler [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Task 055 for 2 seconds	
			Task 049 for 5 seconds	
			Task 056 for 1 second	
			Task 049 for 5 seconds	
			Task 051 for 1 second	
			Task 056 for 1 second	
			Task 056 for 1 second	
			Task 056 for 1 second	
			Task 057 for 10 seconds	
			Task 051 for 1 second	
			Task 055 for 2 seconds	
			Task 049 for 5 seconds	
			Task 056 for 1 second	
			Task 049 for 5 seconds	
			Task 051 for 1 second	
			Continued...	

## FUNCTION 38 Program Doppler [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Task 056 for 1 second	
			Task 056 for 1 second	
			Task 056 for 1 second	
			Task 151 for 12 seconds	
			Task 051 for 1 second	
			Task 055 for 2 seconds	
			Task 049 for 5 seconds	
			Task 056 for 1 second	
			Task 049 for 5 seconds	
			Task 051 for 1 second	
			Task 056 for 1 second	
			Task 056 for 1 second	
			Task 056 for 1 second	
			Task 057 for 10 seconds	
			Task 051 for 1 second	
			Continued...	

## FUNCTION 38 Program Doppler [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Task 055 for 2 seconds	
			Task 049 for 5 seconds	
			Task 056 for 1 second	
			Task 049 for 5 seconds	
			Task 051 for 1 second	
			Task 056 for 1 second	
			Task 056 for 1 second	
			Task 056 for 1 second	
			Task 151 for 12 seconds	
			Task 051 for 1 second	
			Task 055 for 2 seconds	
			Task 049 for 5 seconds	
			Task 056 for 1 second	
			Task 049 for 5 seconds	
			Task 051 for 1 second	
			Continued...	

## FUNCTION 38 Program Doppler [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Task 056 for 1 second	
			Task 056 for 1 second	
			Task 056 for 1 second	
			Task 057 for 10 seconds	
			Task 051 for 1 second	
			Task 055 for 2 seconds	
			Task 049 for 5 seconds	
			Task 056 for 1 second	
			Task 049 for 5 seconds	
			Task 051 for 1 second	
			Task 056 for 1 second	
			Task 056 for 1 second	
			Task 056 for 1 second	
			Task 151 for 12 seconds	
			Task 051 for 1 second	
			Continued...	



## FUNCTION 38 Program Doppler (Continued)

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
			Task 072 for 5 seconds Task 055 for 2 seconds Task 056 for 1 second Task 051 for 1 second Task 072 for 5 seconds Standby .5 second		

## FUNCTION 39 Program Transponder

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 106 for 2 seconds Task 111 for 5 seconds Task 112 for 10 seconds Task 139 for .5 second Task 140 for .5 second Task 133 for .5 second Task 024 for 1 second Task 106 for 2 seconds Task 097 for 2 seconds Task 096 for 1 second Task 099 for 2 seconds Task 098 for 1 second Continued...	

## FUNCTION 39 Program Transponder [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Task 101 for 2 seconds	
			Task 100 for 1 second	
			Task 103 for 2 seconds	
			Task 102 for 1 second	
			Task 024 for 1 second	
			Task 097 for 2 seconds	
			Task 096 for 1 second	
			Task 099 for 2 seconds	
			Task 098 for 1 second	
			Task 101 for 2 seconds	
			Task 100 for 1 second	
			Task 103 for 1 second	
			Task 102 for 2 seconds	
			Task 024 for 1 second	
			Task 097 for 2 seconds	
			Continued...	

## FUNCTION 39 Program Transponder [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Task 096 for 1 second	
			Task 099 for 2 seconds	
			Task 098 for 1 second	
			Task 101 for 2 seconds	
			Task 100 for 1 second	
			Task 103 for 2 seconds	
			Task 102 for 1 second	
			Task 113 for 2 seconds	
			Task 096 for 1 second	
			Task 098 for 1 second	
			Task 100 for 1 second	
			Task 102 for 1 second	
			Standby .5 second	

## FUNCTION 40    Refuel Aircraft

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
<p>Program, in sequence, the following tasks (include a .5-second delay between tasks):</p> <p>Task 120 for 2 seconds</p> <p>Task 121 for 1 second</p> <p>Start Task 132 300 seconds after Task 121 ends.</p> <p>Task 132 lasts 3 seconds.</p> <p>Standby .5 second</p>	<p>.5 seconds after Task 121 ends, randomly select (.50) Task 076 70 times. Task 076 lasts 3 seconds.</p>			<p>70 times during the function, randomly select (.50) Task 076. Task 076 lasts 3 seconds.</p>

**FUNCTION 41**      Respond to Threat

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Program Task 141 for 3 seconds.	.5 second after Task 141 ends, randomly select (.33 probability) Tasks 014, 020, and 078 at 3-second intervals. Continue for 30 seconds.  Standby .5 second		Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 141 for 3 seconds Task 066 for .5 second Task 138 for 1 second		

## FUNCTION 42    Respond to Threat [NVG]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Program Task 141 for 3 seconds.	.5 second after Task 141 ends, randomly select (.33 probability) Tasks 015, 021, and 079 at 4-second intervals. Continue for 40 seconds.  Standby .5 second		Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 141 for 3 seconds Task 066 for .5 second Task 138 for 1 second		

## FUNCTION 43      Unload Aircraft (Internal)

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 149 for 10 seconds Task 150 for 3 seconds Task 038 for 3 seconds Task 037 for 3 seconds Standby .5 second	



## FUNCTION 44      Unload Cargo (External)

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 091 for 3 seconds Task 034 for 1 second Task 088 for .5 second Task 092 for 3 seconds Standby .5 second				

## FUNCTION 45      Update Doppler (Landmark)

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	CONTINUOUS
			Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 049 for 5 seconds Task 055 for 2 seconds Task 056 for 1 second Task 104 for 10 seconds Task 151 for 12 seconds Task 104 for 10 seconds Task 010 for 40 seconds Task 051 for 1 second Task 055 for 2 seconds Standby .5 second	

## FUNCTION 46      Update Doppler (Landmark) [NVG]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 049 for 5 seconds Task 055 for 2 seconds Task 056 for 1 second Task 104 for 10 seconds Task 151 for 12 seconds Task 104 for 10 seconds Task 011 for 40 seconds Task 051 for 1 second Task 055 for 2 seconds	
			Standby .5 second	

## FUNCTION 47      Update Doppler (Mission Change)

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Program, in sequence, the following tasks (include a .5-second delay between tasks):	
			Task 058 for 1 second	
			Task 055 for 2 seconds	
			Task 049 for 5 seconds	
			Task 056 for 1 second	
			Task 056 for 1 second	
			Task 061 for 8 seconds	
			Task 056 for 1 second	
			Task 151 for 12 seconds	
			Task 051 for 1 second	
			Task 072 for 5 seconds.	
			Task 055 for 2 seconds	
			Task 049 for 5 seconds	
			Continued...	

**FUNCTION 47**      **Update Doppler (Mission Change) [Continued]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
			Task 056 for 1 second		
			Task 056 for 1 second		
			Task 060 for 10 seconds		
			Task 056 for 1 second		
			Task 057 for 10 seconds		
			Task 053 for 18 seconds		
			Task 055 for 2 seconds		
			Task 072 for 5 seconds		
			Standby .5 second		

## FUNCTION 48    Update Doppler (PZ)

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
			Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 056 for 1 second Task 051 for 1 second Task 072 for 5 seconds Standby .5 second		

## FUNCTION 49      Update Doppler (Stored Destination)

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 055 for 2 seconds Task 104 for 10 seconds Task 010 for 40 seconds Task 056 for 1 second Task 051 for 1 second Task 072 for 5 seconds Standby .5 second	

## FUNCTION 50      Update Doppler (Stored Destination) [NVG]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 055 for 2 seconds Task 104 for 10 seconds Task 011 for 40 seconds Task 056 for 1 second Task 051 for 1 second Task 072 for 5 seconds Standby .5 second	



## FUNCTION 51 Adjust Approach Parameters

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Randomly select (.20 probability) Tasks 012, 026, 062, 080, and 130 at .5-second intervals. Continue for 240 seconds.  Standby .5 second		

## FUNCTION 52 Adjust Approach Parameters [NVG]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Randomly select (.20 probability) Tasks 016, 028, 063, 086, and 131 at 1-second intervals. Continue for 340 seconds.  Standby .5 second				

## FUNCTION 53      Adjust Climb Parameters

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	<p>Randomly select (.25 probability) Tasks 012, 026, 080, and 128 at .5-second intervals. Continue for 20 seconds.</p> <p>Standby .5 second</p>			

## FUNCTION 54     Adjust Climb Parameters [NVG]

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	<p>randomly select (.25 probability) Tasks 016, 028, 086, and 129 at 1-second intervals. Continue for 30 seconds.</p> <p>Standby .5 second</p>			

## FUNCTION 55

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Randomly select (.25 probability) Tasks 012, 019, 026, and 081 at .5-second intervals. Continue for 30 seconds.  Standby .5 second			

## FUNCTION 56      Adjust Level of Flight Parameters [NVG]

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Randomly select (.25 probability) Tasks 016, 023, 028, and 086 at 1-second intervals. Continue for 30 seconds.  Standby .5 second			

## FUNCTION 57 Check Aircraft Systems (Copilot)

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
			Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 064 for 5 seconds Task 105 for 1 second Task 076 for 3 seconds Standby .5 second		

## FUNCTION 58 Check Approach Parameters

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Randomly select one of the following tasks: Task 152 for 1 second Task 013 for 1 second Task 084 for 1 second Standby .5 second			



## FUNCTION 59 Check Climb Parameters

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Randomly select one of the following tasks: Task 152 for 1 second Task 013 for 1 second Task 084 for 1 second Standby .5 second				

## FUNCTION 60 Check Flight Parameters

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Randomly select one of the following tasks: Task 017 for 1 second Task 013 for 1 second Task 153 for 1 second Task 084 for 1 second Task 147 for 1 second Standby .5 second			

## FUNCTION 61 Check Fuel Consumption Parameters

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 076 for 3 seconds Task 142 for 7 seconds Standby .5 second	

## FUNCTION 62 Check Level of Flight Parameters

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Randomly select one of the following tasks: Task 017 for 1 second Task 013 for 1 second Task 084 for 1 second Standby .5 second			

## FUNCTION 63 Establish Hover

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 123 for 1 second Task 153 for 1 second				

## FUNCTION 64    Establish Hover [NVG]

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Program, in sequence, the following tasks (include a .5-second delay between tasks):  Task 126 for 2 seconds  Task 153 for 1 second				

## FUNCTION 65    Monitor Threat (Copilot)

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
			Program Task 050 for 3 seconds. Standby .5 second		

## FUNCTION 66      Monitor Flight Controls

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
		Program Task 154 for the duration of the segment in which Function 66 occurs.			



## APPENDIX H

### CH-47D SEGMENT SUMMARY WORKSHEETS

This appendix contains the Segment Summary Worksheets for each of the 71 segments. The summary worksheets identify and list all of the functions performed by the pilot and copilot during each mission segment. The summary worksheets also identify the type of functions (i.e., discrete fixed, discrete random, or continuous) performed by the crewmember and the approximate temporal arrangement of the functions within the segments.

## CH-47 SEGMENT SUMMARY WORKSHEET

2

**PHASE 1** Departure (Assembly Area)**SEGMENT 01** Before Takeoff (Assembly Area)

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Perform Before Taxi Check (24)		Monitor Audio (17)	Program Doppler (38)		Monitor Audio (17)
Perform Taxi (35)			Program Transponder (39)		
Perform Taxiing Check (37)	Perform Cockpit Communication (Pilot) (26)		Perform Before Taxi Check (24)	Perform Cockpit Communication (Copilot) (25)	
Perform Before Hover Check (20)	Perform Cockpit Communication (Copilot) (25)		Perform Taxi (35)	Perform Cockpit Communication (Pilot) (26)	
Establish Hover (63)			Perform Taxiing Check (37)		
Perform Hover (29)			Perform Before Hover Check (20)		
Perform Hover Check (30)			Perform Hover (29)		
			Perform Hover Check (30)		
			Perform External Communication (27)		
			Perform Before Takeoff Check (23)		

## CH-47 SEGMENT SUMMARY WORKSHEET

3

**PHASE 1** Departure (Assembly Area) **SEGMENT 02** Takeoff (Assembly Area)

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Climb (07)	Monitor Threat (Pilot) (18)	Monitor Audio (17)		Monitor Threat (Copilot) (65)	Monitor Audio (17)
Adjust Climb Parameters (53)	Check Climb Parameters (59)			Check Aircraft Systems (Copilot) (57)	
Establish Level of Flight (09)	Perform Cockpit Communication (Pilot) (26)		Check Fuel Consumption Parameters (61)	Perform Cockpit Communication (Copilot) (25)	
Adjust Level of Flight Parameters (55)	Check Aircraft Systems (Pilot) (03)			Perform Cockpit Communication (Pilot) (26)	
	Perform Cockpit Communication (Copilot) (25)				
	Check Level of Flight Parameters (62)				

## CH-47 SEGMENT SUMMARY WORKSHEET

4

**PHASE 1** Departure (Assembly Area) **SEGMENT 03** Before Takeoff (Assembly Area) [NVG]

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
Perform Before Taxi Check (24)		Program Doppler (38)	Monitor Audio (17)
Perform Taxi [NVG] (36)		Program Transponder (39)	
Perform Taxiing Check (37)		Perform Before Taxi Check (24)	
Perform Before Hover Check (20)		Perform Taxi [NVG] (36)	
Establish Hover [NVG] (64)	Perform Cockpit Communication (Pilot) (26)	Perform Taxiing Check (37)	Perform Cockpit Communication (Copilot) (25)
Perform Hover [NVG] (32)	Perform Cockpit Communication (Copilot) (25)	Perform Before Hover Check (20)	Perform Cockpit Communication (Pilot) (26)
Perform Hover Check [NVG] (31)		Perform Hover [NVG] (32)	
		Perform Hover Check [NVG] (31)	
		Perform External Communication (27)	
		Perform Before Takeoff Check (23)	

## CH-47 SEGMENT SUMMARY WORKSHEET

5

PHASE 1 Departure (Assembly Area)

SEGMENT 04 Takeoff [NVG]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Climb [NVG] (08)	Monitor Threat (Pilot) (18)	Monitor Audio (17)		Monitor Threat (Copilot) (65)	Monitor Audio (17)
Adjust Climb Parameters [NVG] (54)	Check Climb Parameters [NVG] (59)			Check Aircraft Systems (Copilot) (57)	
	Perform Cockpit Communication (Pilot) (26)		Check Fuel Consumption Parameters (61)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	
Establish Level of Flight [NVG] (10)	Check Aircraft Systems (Pilot) (03)				
Adjust Level of Flight Parameters [NVG] (56)	Check Level of Flight Parameters [NVG] (62)				

**PHASE 2 Enroute (AA - PZ)****\* SEGMENT 05 Contour Flight\***

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Monitor Threat (Pilot) (18)	Adjust Flight Parameters (01)		Monitor Threat (Copilot) (65)	Perform Navigation (33)
	Check Flight Parameters (60)	Monitor Audio (17)		Check Aircraft Systems (Copilot) (57)	Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)		Update Doppler (Stored Destination) (49)		
	Perform Cockpit Communication (Pilot) (26)		Compute Fuel Burn Rate (04)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	
			Update Doppler (Landmark) (45)		

\*Denotes segment that occurs in more than one mission phase.

## PHASE 2 Enroute (AA - PZ)

## \* SEGMENT 06 Contour Flight [NVG]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Monitor Threat (Pilot) (18)	Adjust Flight Parameters [NVG] (02)		Monitor Threat (Copilot) (65)	Perform Navigation [NVG] (34)
	Check Flight Parameters (60)	Monitor Audio (17)		Check Aircraft Systems (Copilot) (57)	Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)		Update Doppler (Stored Destination) [NVG] (50)		
	Perform Cockpit Communication (Pilot) (26)		Compute Fuel Burn Rate (04)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	
			Update Doppler (Landmark) [NVG] (46)		

\* Denotes segment that occurs in more than one mission phase.

## PHASE 2 Enroute (AA - PZ)

## \*SEGMENT 07 Contour Flight (Threat)

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Respond to Threat (41)	Monitor Threat (Pilot) (18)	Adjust Flight Parameters (01)		Monitor Threat (Copilot) (65)	Perform Navigation (33)
	Check Flight Parameters (60)	Monitor Audio (17)		Check Aircraft Systems (Copilot) (57)	Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)		Update Doppler (Stored Destination) (49)		
	Perform Cockpit Communication (Pilot) (26)		Compute Fuel Burn Rate (04)		
	Perform Cockpit Communication (Copilot) (25)		Respond to Threat (41)	Perform Cockpit Communication (Copilot) (25)	
			Perform External Communication (Threat) (28)	Perform Cockpit Communication (Pilot) (26)	
			Update Doppler (Landmark) (45)		

\*Denotes segment that occurs in more than one mission phase.



## PHASE 2 Enroute (AA - PZ)

## \* SEGMENT 08 Contour Flight (Threat) [NVG]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Respond to Threat [NVG] (42)	Monitor Threat (Pilot) (18)	Adjust Flight Parameters [NVG] (02)		Monitor Threat (Copilot) (65)	Perform Navigation [NVG] (34)
	Check Flight Parameters (60)	Monitor Audio (17)		Check Aircraft Systems (Copilot) (57)	Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)		Update Doppler (Stored Destination) [NVG] (50)		
	Perform Cockpit Communication (Pilot) (26)		Compute Fuel Burn Rate (04)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)		Respond to Threat [NVG] (42)	Perform Cockpit Communication (Pilot) (26)	
			Perform External Communication (Threat) (28)		
			Update Doppler (Landmark) [NVG] (46)		

\* Denotes segment that occurs in more than one mission phase.

**PHASE 2 Enroute (AA - PZ)****\* SEGMENT 09 Contour Flight (Mission Change)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Monitor Threat (Pilot) (18)	Adjust Flight Parameters (01)		Monitor Threat (Copilot) (65)	Perform Navigation (33)
	Check Flight Parameters (60)	Monitor Audio (17)		Check Aircraft Systems (Copilot) (57)	Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)		Update Doppler (Landmark) (45)		
	Perform Cockpit Communication (Pilot) (26)		Compute Fuel Burn Rate (04)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)		Mission Change (16)	Perform Cockpit Communication (Pilot) (26)	
			Update Doppler (Mission Change) (47)		

\*Denotes segment that occurs in more than one mission phase.

## CH-47 SEGMENT SUMMARY WORKSHEET

11

PHASE 2 Enroute (AA - PZ)

\* SEGMENT 10 Contour Flight (Mission Change) [NVG]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Monitor Threat (Pilot) (18)	Adjust Flight Parameters [NVG] (02)		Monitor Threat (Copilot) (65)	Perform Navigation [NVG] (34)
	Check Flight Parameters (60)	Monitor Audio (17)		Check Aircraft Systems (Copilot) (57)	Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)		Update Doppler (Landmark) [NVG] (46)		
	Perform Cockpit Communication (Pilot) (26)		Compute Fuel Burn Rate (04)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)		Mission Change (16)	Perform Cockpit Communication (Pilot) (26)	
			Update Doppler (Mission Change) (47)		

\* Denotes segment that occurs in more than one mission phase.

**PHASE 2 Enroute (AA - PZ)****\*SEGMENT 11 Approach**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Approach (05)	Monitor Threat (Pilot) (18)	Monitor Audio (17)	Perform External Communication (27)	Monitor Threat (Copilot) (65)	Monitor Audio (17)
Adjust Approach Parameters (51)	Perform Cockpit Communication (Pilot) (26)		Perform Before Landing Check (21)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	
	Check Aircraft Systems (Pilot) (03)			Check Aircraft Systems (Copilot) (57)	
	Check Approach Parameters (58)				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 2 Enroute (AA - PZ)****\*SEGMENT 12 Landing**

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Establish Hover (63) Perform Hover (29) Land Aircraft (11)	Perform Cockpit Communication (Pilot) (26) Perform Cockpit Communication (Copilot) (25)	Monitor Audio (17)	Perform Hover (29) Perform External Communication (27) Land Aircraft (11) Perform After Landing Check (19)	Perform Cockpit Communication (Copilot) (25) Perform Cockpit Communication (Pilot) (26)
Perform After Landing Check (19)				Monitor Audio (17)

\*Denotes segment that occurs in more than one mission phase.

## PHASE 2 Enroute (AA - PZ)

## \* SEGMENT 13 Approach [NVG]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Approach [NVG] (06)	Monitor Threat (Pilot) (18)	Monitor Audio (17)	Perform External Communication (27)	Monitor Threat (Copilot) (65)	Monitor Audio (17)
Adjust Approach Parameters [NVG] (52)	Perform Cockpit Communication (Pilot) (26)		Perform Before Landing Check (21)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	
	Check Aircraft Systems (Pilot) (03)			Check Aircraft Systems (Copilot) (57)	
	Check Approach Parameters [NVG] (58)				

\*Denotes segment that occurs in more than one mission phase.

## PHASE 2 Enroute (AA - PZ)

## \* SEGMENT 14 Landing [NVG]

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
Establish Hover [NVG] (64)			Monitor Audio (17)
Perform Hover [NVG] (32)		Perform Hover [NVG] (32)	
Land Aircraft [NVG] (12)		Perform External Communication (27)	
	Perform Cockpit Communication (Pilot) (26)	Land Aircraft [NVG] (12)	Perform Cockpit Communication (Copilot) (25)
Perform After Landing Check (19)	Perform Cockpit Communication (Copilot) (25)	Perform After Landing Check (19)	Perform Cockpit Communication (Pilot) (26)

\*Denotes segment that occurs in more than one mission phase.

**PHASE 3 Departure (PZ)** **SEGMENT 15 Before Takeoff (Internal Load)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Perform Before Takeoff Check (23)		Monitor Audio (17)	Update Doppler (PZ) (48)		Monitor Audio (17)
			Load Aircraft (Internal) (13)		
	Perform Cockpit Communication (Pilot) (26)			Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)		Perform External Communication (27)	Perform Cockpit Communication (Pilot) (26)	
			Perform Before Takeoff Check (23)		



**PHASE 3 Departure (PZ)****\*SEGMENT 16 Takeoff**

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Establish Hover (63)	Monitor Threat (Pilot) (18)	Monitor Audio (17)	Perform Hover (29)	Monitor Threat (Copilot) (65)
Perform Hover (29)				Check Aircraft Systems (Copilot) (57)
Establish Climb (07)				
Adjust Climb Parameters (53)	Check Climb Parameters (59)			Perform Cockpit Communication (Copilot) (25)
	Perform Cockpit Communication (Pilot) (26)			
Establish Level of Flight (09)	Check Aircraft Systems (Pilot) (03)		Check Fuel Consumption Parameters (61)	
Adjust Level of Flight Parameters (55)	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)
	Check Level of Flight Parameters (62)			

\*Denotes segment that occurs in more than one mission phase.

**PHASE 3 Departure (PZ)****\*SEGMENT 17 Takeoff [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Hover [NVG] (64)	Monitor Threat (Pilot) (18)	Monitor Audio (17)	Perform Hover (29)	Monitor Threat (Copilot) (65)	Monitor Audio (17)
Perform Hover [NVG] (32)				Check Aircraft Systems (Copilot) (57)	
Establish Climb [NVG] (08)				Perform Cockpit Communication (Copilot) (25)	
Adjust Climb Parameters [NVG] (54)	Perform Cockpit Communication (Pilot) (26)		Check Fuel Consumption Parameters (61)	Perform Cockpit Communication (Pilot) (26)	
Establish Level of Flight [NVG] (10)	Check Climb Parameters (59)				
Adjust Level of Flight Parameters [NVG] (56)	Perform Cockpit Communication (Copilot) (25)				
	Check Aircraft Systems (Pilot) (03)				
	Check Level of Flight Parameters (62)				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 3 Departure (PZ)** **SEGMENT 18 Before Takeoff (External Load)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
		Monitor Audio (17)	Update Doppler (PZ) (48) Load Aircraft (Internal) (13)	Perform Cockpit Communication (Copilot) (25) Perform Cockpit Communication (Pilot) (26)	Monitor Audio (17)
Perform Before Takeoff Check (23)			Perform Before Takeoff Check (23) Perform External Communication (27) Load Cargo (External) (14)		

**PHASE 3 Departure (PZ)****SEGMENT 19 Takeoff (External)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Climb (07)	Monitor Threat (Pilot) (18)	Monitor Audio (17)		Monitor Threat (Copilot) (65)	Monitor Audio (17)
Adjust Climb Parameters (53)	Check Climb Parameters (59)			Perform Cockpit Communication (Copilot) (25)	
Establish Level of Flight (09)	Perform Cockpit Communication (Pilot) (26)			Perform Cockpit Communication (Pilot) (26)	
Adjust Level of Flight Parameters (55)	Perform Cockpit Communication (Copilot) (25)			Check Aircraft Systems (Copilot) (57)	
	Check Level of Flight Parameters (62)		Check Fuel Consumption Parameters (61)		
	Check Aircraft Systems (Pilot) (03)				

PHASE 3 Departure (PZ)SEGMENT 2C Before Takeoff (External Load) [NVG]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
		Monitor Audio (17)	Update Doppler (PZ) (48) Load Aircraft (Internal) (13)	Perform Cockpit Communication (Copilot) (25) Perform Cockpit Communication (Pilot) (26)	Monitor Audio (17)
Perform Before Takeoff Check (23)			Perform Before Takeoff Check (23) Perform External Communication (27) Load Cargo (External) [NVG] (15)		
Load Cargo (External) [NVG] (15)					

**PHASE 3 Departure (PZ)** **SEGMENT 21 Takeoff (External) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Climb [NVG] (08)	Monitor Threat (Pilot) (18)	Monitor Audio (17)		Monitor Threat (Copilot) (65)	Monitor Audio (17)
Adjust Climb Parameters [NVG] (54)	Check Climb Parameters (59)			Perform Cockpit Communication (Copilot) (25)	
Establish Level of Flight [NVG] (10)	Perform Cockpit Communication (Pilot) (26)			Perform Cockpit Communication (Pilot) (26)	
Adjust Level of Flight Parameters [NVG] (56)	Perform Cockpit Communication (Copilot) (25)			Check Aircraft Systems (Copilot) (57)	
	Check Aircraft Systems (Pilot) (03)				
	Check Level of Flight Parameters (62)		Check Fuel Consumption Parameters (61)		

**PHASE 4 Enroute (PZ - LZ)****\*SEGMENT 22 22 NOE Flight**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Monitor Threat (Pilot) (18)	Adjust Flight Parameters (01)		Monitor Threat (Copilot) (65)	Perform Navigation (33) Monitor Audio (17)
	Check Flight Parameters (60)	Monitor Audio (17)		Check Aircraft Systems (Copilot) (57)	
	Check Aircraft Systems (Pilot) (03)		Compute Fuel Burn Rate (04)		
	Perform Cockpit Communication (Pilot) (26)			Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 4 Enroute (PZ - LZ)****\*SEGMENT 23 NOE Flight [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Monitor Threat (Pilot) (18)	Adjust Flight Parameters [NVG] (02)		Monitor Threat (Copilot) (65)	Perform Navigation [NVG] (34)
	Check Flight Parameters (60)	Monitor Audio (17)			Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)			Check Aircraft Systems (Copilot) (57)	
			Compute Fuel Burn Rate (04)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Pilot) (26)			Perform Cockpit Communication (Pilot) (26)	
	Perform Cockpit Communication (Copilot) (25)				

\*Denotes segment that occurs in more than one mission phase.



**PHASE 4 Enroute (PZ - LZ)****\* SEGMENT 24 NOE Flight (Threat)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Respond to Threat (41)	Monitor Threat (Pilot) (18)	Adjust Flight Parameters (01)		Monitor Threat (Copilot) (65)	Perform Navigation (33)
	Check Flight Parameters (60)	Monitor Audio (17)			Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)			Check Aircraft Systems (Copilot) (57)	
	Perform Cockpit Communication (Pilot) (26)		Perform External Communication (Threat) (28)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)		Respond to Threat (41)	Perform Cockpit Communication (Pilot) (26)	
			Compute Fuel Burn Rate (04)		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 4 Enroute (PZ - LZ)****\*SEGMENT 25 NOE Flight (Threat) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Respond to Threat [NVG] (42)	Monitor Threat (Pilot) (18)	Adjust Flight Parameters [NVG] (02)		Monitor Threat (Copilot) (65)	Perform Navigation (33)
	Check Flight Parameters (60)	Monitor Audio (17)			Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)			Check Aircraft Systems (Copilot) (57)	
	Perform Cockpit Communication (Pilot) (26)		Perform External Communication (Threat) (28)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)		Respond to Threat [NVG] (42)	Perform Cockpit Communication (Pilot) (26)	
			Compute Fuel Burn Rate (04)		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 4 Enroute (PZ - LZ)**      **\*SEGMENT 26 NOE Flight (Mission Change)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Monitor Threat (Pilot) (18)	Adjust Flight Parameters (01)		Monitor Threat (Copilot) (65)	Perform Navigation (33)
	Check Flight Parameters (60)	Monitor Audio (17)			Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)			Check Aircraft Systems (Copilot) (57)	
			Mission Change (16)		
			Update Doppler (Mission Change) (47)		
	Perform Cockpit Communication (Pilot) (26)		Compute Fuel Burn Rate (04)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 4 Enroute (PZ - LZ)****\*SEGMENT 27 NOE Flight (Mission Change) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Monitor Threat (Pilot) (18)	Adjust Flight Parameters [NVG] (02)		Monitor Threat (Copilot) (65)	Perform Navigation [NVG] (34)
	Check Flight Parameters (60)	Monitor Audio (17)			Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)			Check Aircraft Systems (Copilot) (57)	
			Mission Change (16)		
			Update Doppler (Mission Change) (47)		
	Perform Cockpit Communication (Pilot) (26)		Compute Fuel Burn Rate (04)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 4 Enroute (PZ - LZ)****SEGMENT 28 Approach (LZ)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Approach (05) Adjust Approach Parameters (51)	Monitor Threat (Pilot) (18)  Check Approach Parameters (58) Perform Cockpit Communication (Pilot) (26) Perform Cockpit Communication (Copilot) (25) Check Aircraft Systems (Pilot) (03)	Monitor Audio (17)	Perform Before Landing Check (LZ) (22)	Monitor Threat (Copilot) (65)  Perform Cockpit Communication (Copilot) (25) Perform Cockpit Communication (Pilot) (26) Check Aircraft Systems (Copilot) (57)	Monitor Audio (17)

**PHASE 4 Enroute (PZ - LZ)**      **SEGMENT 29 Landing (LZ, Internal Load)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Hover (63)		Monitor Audio (17)	Perform Hover (29)		Monitor Audio (17)
Perform Hover (29)			Land Aircraft (11)	Perform Cockpit Communication (Copilot) (25)	
Land Aircraft (11)	Perform Cockpit Communication (Pilot) (26)			Perform Cockpit Communication (Pilot) (26)	
	Perform Cockpit Communication (Copilot) (25)		Unload Aircraft (Internal) (43)		

**PHASE 4 Enroute (PZ - LZ)** **SEGMENT 30 Landing (LZ, External Load)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Hover (63)		Monitor Audio (17)	Perform Hover (29)		Monitor Audio (17)
Perform Hover (29)				Perform Cockpit Communication (Copilot) (25)	
Unload Cargo (External) (44)	Perform Cockpit Communication (Pilot) (26)			Perform Cockpit Communication (Pilot) (26)	
	Perform Cockpit Communication (Copilot) (25)		Land Aircraft (11)		
Land Aircraft (11)			Unload Aircraft (Internal) (43)		

**PHASE 4 Enroute (PZ - LZ)****SEGMENT 31 Approach (LZ) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Approach [NVG] (06)	Monitor Threat (Pilot) (18)	Monitor Audio (17)		Monitor Threat (Copilot) (65)	Monitor Audio (17)
Adjust Approach Parameters [NVG] (52)	Check Approach Parameters (58)		Perform Before Landing Check (LZ) (22)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Pilot) (26)			Perform Cockpit Communication (Pilot) (26)	
	Perform Cockpit Communication (Copilot) (25)			Check Aircraft Systems (Copilot) (57)	
	Check Aircraft Systems (Pilot) (03)				



**PHASE 4 Enroute (PZ - LZ)** **SEGMENT 32 Landing (LZ, Internal Load) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Hover [NVG] (64)		Monitor Audio (17)	Perform Hover [NVG] (32)		Monitor Audio (17)
Perform Hover [NVG] (32)			Land Aircraft [NVG] (12)	Perform Cockpit Communication (Copilot) (25)	
Land Aircraft [NVG] (12)	Perform Cockpit Communication (Pilot) (26) Perform Cockpit Communication (Copilot) (25)		Unload Aircraft (Internal) (43)	Perform Cockpit Communication (Pilot) (26)	

**PHASE 4 Enroute (PZ - LZ)****SEGMENT 33 Landing (LZ, External Load) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Hover [NVG] (64)		Monitor Audio (17)	Perform Hover [NVG] (32)		Monitor Audio (17)
Perform Hover [NVG] (32)				Perform Cockpit Communication (Copilot) (25)	
Unload Cargo (External) (44)	Perform Cockpit Communication (Pilot) (26)			Perform Cockpit Communication (Pilot) (26)	
Land Aircraft [NVG] (12)			Land Aircraft [NVG] (12)		
			Unload Aircraft (Internal) (43)		

**PHASE 5 Departure (LZ)** **SEGMENT 34 Before Takeoff (LZ)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Perform Before Takeoff Check (23)		Monitor Audio (17)	Update Doppler (PZ) (48) Perform Before Takeoff Check (23)	Perform Cockpit Communication (Pilot) (26) Perform Cockpit Communication (Copilot) (25)	Monitor Audio (17)

**PHASE 5 Departure (LZ)****\*SEGMENT 16 Takeoff**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Hover (63)	Monitor Threat (Pilot) (18)	Monitor Audio (17)	Perform Hover (29)	Monitor Threat (Copilot) (65)	Monitor Audio (17)
Perform Hover (29)				Check Aircraft Systems (Copilot) (57)	
Establish Climb (07)					
Adjust Climb Parameters (53)	Check Climb Parameters (59)			Perform Cockpit Communication (Copilot) (25)	
Establish Level of Flight (09)	Perform Cockpit Communication (Pilot) (26)				
	Check Aircraft Systems (Pilot) (03)		Check Fuel Consumption Parameters (61)		
Adjust Level of Flight Parameters (55)	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	
	Check Level of Flight Parameters (62)				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 5 Departure (LZ)****\*SEGMENT 17 Takeoff [NVG]**

<b>PILOT</b>			<b>COPilot</b>		
<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>	<b>CONTINUOUS</b>	<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>	<b>CONTINUOUS</b>
Establish Hover [NVG] (64)	Monitor Threat (Pilot) (18)	Monitor Audio (17)	Perform Hover (29)	Monitor Threat (Copilot) (65)	Monitor Audio (17)
Perform Hover [NVG] (32)				Check Aircraft Systems (Copilot) (57)	
Establish Climb [NVG] (08)				Perform Cockpit Communication (Pilot) (26)	
Adjust Climb Parameters [NVG] (54)	Perform Cockpit Communication (Pilot) (26)		Check Fuel Consumption Parameters (61)	Perform Cockpit Communication (Copilot) (25)	
Establish Level of Flight [NVG] (10)	Check Climb Parameters (59)				
Adjust Level of Flight Parameters [NVG] (56)	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	
	Check Aircraft Systems (Pilot) (03)				
	Check Level of Flight Parameters (62)				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ - PZ) or (LZ - FARP)****\*SEGMENT 22 22 NOE Flight**

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	Monitor Threat (Pilot) (18)	Adjust Flight Parameters (01)		Monitor Threat (Copilot) (65)
	Check Flight Parameters (60)	Monitor Audio (17)		
	Check Aircraft Systems (Pilot) (03)		Compute Fuel Burn Rate (04)	Check Aircraft Systems (Copilot) (57)
	Perform Cockpit Communication (Pilot) (26)			Perform Cockpit Communication (Copilot) (25)
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)
				Perform Navigation (33) Monitor Audio (17)

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ - PZ) or (LZ - FARP)****\*SEGMENT 23 NOE Flight [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Monitor Threat (Pilot) (18)	Adjust Flight Parameters [NVG] (02)		Monitor Threat (Copilot) (65)	Perform Navigation [NVG] (34)
	Check Flight Parameters (60)	Monitor Audio (17)			Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)		Compute Fuel Burn Rate (04)	Check Aircraft Systems (Copilot) (57)	
	Perform Cockpit Communication (Pilot) (26)			Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ - PZ) or (LZ - FARP)****\* SEGMENT 24 NOE Flight (Threat)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Respond to Threat (41)	Monitor Threat (Pilot) (18)	Adjust Flight Parameters (01)		Monitor Threat (Copilot) (65)	Perform Navigation (33)
	Check Flight Parameters (60)	Monitor Audio (17)		Check Aircraft Systems (Copilot) (57)	Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)		Perform External Communication (Threat) (28)		
	Perform Cockpit Communication (Pilot) (26)			Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)		Respond to Threat (41)	Perform Cockpit Communication (Pilot) (26)	
			Compute Fuel Burn Rate (04)		

\*Denotes segment that occurs in more than one mission phase.



**PHASE 6 Enroute (LZ - PZ) or (LZ - FARP)**      **\*SEGMENT 25 NOE Flight (Threat) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Respond to Threat [NVG] (42)	Monitor Threat (Pilot) (18)	Adjust Flight Parameters [NVG] (02)		Monitor Threat (Copilot) (65)	Perform Navigation (33)
	Check Flight Parameters (60)	Monitor Audio (17)			Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)			Check Aircraft Systems (Copilot) (57)	
	Perform Cockpit Communication (Pilot) (26)		Perform External Communication (Threat) (28)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)		Respond to Threat [NVG] (42)	Perform Cockpit Communication (Pilot) (26)	
			Compute Fuel Burn Rate (04)		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ - PZ) or (LZ - FARP)**      **\*SEGMENT 26 NOE Flight (Mission Change)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Monitor Threat (Pilot) (18)	Adjust Flight Parameters (01)		Monitor Threat (Copilot) (65)	Perform Navigation (33)
	Check Flight Parameters (60)	Monitor Audio (17)			Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)			Check Aircraft Systems (Copilot) (57)	
			Mission Change (16)		
			Update Doppler (Mission Change) (47)		
	Perform Cockpit Communication (Pilot) (26)		Compute Fuel Burn Rate (04)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ - PZ) or (LZ - FARP)**      **\*SEGMENT 27 NOE Flight (Mission Change) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Monitor Threat (Pilot) (18)	Adjust Flight Parameters [NVG] (02)		Monitor Threat (Copilot) (65)	Perform Navigation [NVG] (34)
	Check Flight Parameters (60)	Monitor Audio (17)			Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)			Check Aircraft Systems (Copilot) (57)	
			Mission Change (16)		
			Update Doppler (Mission Change) (47)		
	Perform Cockpit Communication (Pilot) (26)		Compute Fuel Burn Rate (04)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ - PZ) or (LZ - FARP)****\*SEGMENT 11 Approach**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Approach (05) Adjust Approach Parameters (51)	Monitor Threat (Pilot) (18) Perform Cockpit Communication (Pilot) (26) Perform Cockpit Communication (Copilot) (25) Check Aircraft Systems (Pilot) (03) Check Approach Parameters (58)	Monitor Audio (17)	Perform External Communication (27) Perform Before Landing Check (21)	Monitor Threat (Copilot) (65) Perform Cockpit Communication (Copilot) (25) Perform Cockpit Communication (Pilot) (26) Check Aircraft Systems (Copilot) (57)	Monitor Audio (17)

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ - PZ) or (LZ - FARP)****\*SEGMENT 12 Landing**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Hover (63)		Monitor Audio (17)	Perform Hover (29)		Monitor Audio (17)
Perform Hover (29)			Perform External Communication (27)		
Land Aircraft (11)	Perform Cockpit Communication (Pilot) (26)		Land Aircraft (11)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)		Perform After Landing Check (19)	Perform Cockpit Communication (Pilot) (26)	
Perform After Landing Check (19)					

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ - PZ) or (LZ - FARP)****\*SEGMENT 13 Approach [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Approach [NVG] (06)	Monitor Threat (Pilot) (18)	Monitor Audio (17)	Perform External Communication (27)	Monitor Threat (Copilot) (65)	Monitor Audio (17)
Adjust Approach Parameters [NVG] (52)	Perform Cockpit Communication (Pilot) (26)		Perform Before Landing Check (21)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	
	Check Aircraft Systems (Pilot) (03)			Check Aircraft Systems (Copilot) (57)	
	Check Approach Parameters [NVG] (58)				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ - PZ) or (LZ - FARP)****\*SEGMENT 14 Landing [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Hover [NVG] (64)		Monitor Audio (17)			Monitor Audio (17)
Perform Hover [NVG] (32)			Perform Hover [NVG] (32)		
Land Aircraft [NVG] (12)			Perform External Communication (27)		
	Perform Cockpit Communication (Pilot) (26)		Land Aircraft [NVG] (12)	Perform Cockpit Communication (Copilot) (25)	
Perform After Landing Check (19)	Perform Cockpit Communication (Copilot) (25)		Perform After Landing Check (19)	Perform Cockpit Communication (Pilot) (26)	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 7 FARP Operations****SEGMENT 35 FARP Procedures**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Perform Taxi (35)		Monitor Audio (17)	Perform Taxi (35)		Monitor Audio (17)
Refuel Aircraft (40)	Perform Cockpit Communication (Pilot) (26)		Refuel Aircraft (40)	Perform Cockpit Communication (Copilot) (25)	
Perform Before Taxi Check (24)	Perform Cockpit Communication (Copilot) (25)		Perform Before Taxi Check (24)	Perform Cockpit Communication (Pilot) (26)	
Perform Taxi (35)			Perform Taxi (35)		



## PHASE 7 FARP Operations

## SEGMENT 36 FARP Procedures [NVG]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Perform Taxi [NVG] (36) Refuel Aircraft (40) Perform Before Taxi Check (24)	Perform Cockpit Communication (Pilot) (26) Perform Cockpit Communication (Copilot) (25)	Monitor Audio (17)	Perform Taxi [NVG] (36) Refuel Aircraft (40) Perform Before Taxi Check (24)	Perform Cockpit Communication (Copilot) (25) Perform Cockpit Communication (Pilot) (26)	Monitor Audio (17)
Perform Taxi [NVG] (36)			Perform Taxi [NVG] (36)		

**PHASE 7 FARP Operations****SEGMENT 37 Before Takeoff (FARP)**

<b>PILOT</b>			<b>COPILOT</b>		
<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>	<b>CONTINUOUS</b>	<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>	<b>CONTINUOUS</b>
Perform Before Takeoff Check (23)	Perform Cockpit Communication (Pilot) (26) Perform Cockpit Communication (Copilot) (25)	Monitor Audio (17)	Perform External Communication (27) Update Doppler (PZ) (48) Perform Before Takeoff Check (23)	Perform Cockpit Communication (Copilot) (25) Perform Cockpit Communication (Pilot) (26)	Monitor Audio (17)

**PHASE 7 FARP Operations****\*SEGMENT 16 Takeoff**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Hover (63)	Monitor Threat (Pilot) (18)	Monitor Audio (17)	Perform Hover (29)	Monitor Threat (Copilot) (65)	Monitor Audio (17)
Perform Hover (29)				Check Aircraft Systems (Copilot) (57)	
Establish Climb (07)	Check Climb Parameters (59)			Perform Cockpit Communication (Copilot) (25)	
Adjust Climb Parameters (53)	Perform Cockpit Communication (Pilot) (26)			Perform Cockpit Communication (Pilot) (26)	
Establish Level of Flight (09)	Check Aircraft Systems (Pilot) (03)	Check Fuel Consumption Parameters (61)			
Adjust Level of Flight Parameters (55)	Perform Cockpit Communication (Copilot) (25)				
	Check Level of Flight Parameters (62)				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 7 FARP Operations****\*SEGMENT 17 Takeoff [NVG]**

<b>PILOT</b>			<b>COPILOT</b>		
<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>	<b>CONTINUOUS</b>	<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>	<b>CONTINUOUS</b>
Establish Hover [NVG] (64)	Monitor Threat (Pilot) (18)	Monitor Audio (17)	Perform Hover (29)	Monitor Threat (Copilot) (65)	Monitor Audio (17)
Perform Hover [NVG] (32)				Check Aircraft Systems (Copilot) (57)	
Establish Climb [NVG] (08)				Perform Cockpit Communication (Copilot) (25)	
Adjust Climb Parameters [NVG] (54)	Perform Cockpit Communication (Pilot) (26)		Check Fuel Consumption Parameters (61)	Perform Cockpit Communication (Pilot) (26)	
Establish Level of Flight [NVG] (10)	Check Climb Parameters (59)				
Adjust Level of Flight Parameters [NVG] (56)	Perform Cockpit Communication (Copilot) (25)				
	Check Aircraft Systems (Pilot) (03)				
	Check Level of Flight Parameters (62)				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 8 Enroute (FARP - PZ)****\*SEGMENT 22 22 NOE Flight**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Monitor Threat (Pilot) (18)	Adjust Flight Parameters (01)		Monitor Threat (Copilot) (65)	Perform Navigation (33) Monitor Audio (17)
	Check Flight Parameters (60)	Monitor Audio (17)		Check Aircraft Systems (Copilot) (57)	
	Check Aircraft Systems (Pilot) (03)		Compute Fuel Burn Rate (04)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Pilot) (26)			Perform Cockpit Communication (Pilot) (26)	
	Perform Cockpit Communication (Copilot) (25)				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 8 Enroute (FARP - PZ)****\*SEGMENT 23 NOE Flight [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Monitor Threat (Pilot) (18)	Adjust Flight Parameters [NVG] (02)		Monitor Threat (Copilot) (65)	Perform Navigation [NVG] (34)
	Check Flight Parameters (60)	Monitor Audio (17)			Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)			Check Aircraft Systems (Copilot) (57)	
	Perform Cockpit Communication (Pilot) (26)		Compute Fuel Burn Rate (04)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 8 Enroute (FARP - PZ)****\*SEGMENT 24 NOE Flight (Threat)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Respond to Threat (41)	Monitor Threat (Pilot) (18)	Adjust Flight Parameters (01)		Monitor Threat (Copilot) (65)	Perform Navigation (33)
	Check Flight Parameters (60)	Monitor Audio (17)		Check Aircraft Systems (Copilot) (57)	Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)		Perform External Communication (Threat) (28)		
	Perform Cockpit Communication (Pilot) (26)			Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)		Respond to Threat (41)	Perform Cockpit Communication (Pilot) (26)	
			Compute Fuel Burn Rate (04)		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 8 Enroute (FARP - PZ)****\*SEGMENT 25 NOE Flight (Threat) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Respond to Threat [NVG] (42)	Monitor Threat (Pilot) (18)	Adjust Flight Parameters [NVG] (02)		Monitor Threat (Copilot) (65)	Perform Navigation (33)
	Check Flight Parameters (60)	Monitor Audio (17)			Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)			Check Aircraft Systems (Copilot) (57)	
	Perform Cockpit Communication (Pilot) (26)		Perform External Communication (Threat) (28)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)		Respond to Threat [NVG] (42)	Perform Cockpit Communication (Pilot) (26)	
			Compute Fuel Burn Rate (04)		

\*Denotes segment that occurs in more than one mission phase.



**PHASE 8 Enroute (FARP - PZ)**      **\* SEGMENT 26 NOE Flight (Mission Change)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Monitor Threat (Pilot) (18)	Adjust Flight Parameters (01)		Monitor Threat (Copilot) (65)	Perform Navigation (33)
	Check Flight Parameters (60)	Monitor Audio (17)			Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)			Check Aircraft Systems (Copilot) (57)	
			Mission Change (16)		
			Update Doppler (Mission Change) (47)		
	Perform Cockpit Communication (Pilot) (26)		Compute Fuel Burn Rate (04)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 8 Enroute (FARP - PZ)**      **\*SEGMENT 27 NOE Flight (Mission Change) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Monitor Threat (Pilot) (18)	Adjust Flight Parameters [NVG] (02)		Monitor Threat (Copilot) (65)	Perform Navigation [NVG] (34)
	Check Flight Parameters (60)	Monitor Audio (17)			Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)			Check Aircraft Systems (Copilot) (57)	
			Mission Change (16)		
			Update Doppler (Mission Change) (47)		
	Perform Cockpit Communication (Pilot) (26)		Compute Fuel Burn Rate (04)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 8 Enroute (FARP - PZ)****\*SEGMENT 11 Approach**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Approach (05)	Monitor Threat (Pilot) (18)	Monitor Audio (17)	Perform External Communication (27)	Monitor Threat (Copilot) (65)	Monitor Audio (17)
Adjust Approach Parameters (51)	Perform Cockpit Communication (Pilot) (26)		Perform Before Landing Check (21)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	
	Check Aircraft Systems (Pilot) (03)			Check Aircraft Systems (Copilot) (57)	
	Check Approach Parameters (58)				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 8 Enroute (FARP - PZ)****\*SEGMENT 12 Landing**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Hover (63)		Monitor Audio (17)	Perform Hover (29)		Monitor Audio (17)
Perform Hover (29)			Perform External Communication (27)	Perform Cockpit Communication (Copilot) (25)	
Land Aircraft (11)	Perform Cockpit Communication (Pilot) (26)		Land Aircraft (11)	Perform Cockpit Communication (Pilot) (26)	
	Perform Cockpit Communication (Copilot) (25)		Perform After Landing Check (19)		

\*Denotes segment that occurs in more than one mission phase.

## PHASE 8 Enroute (FARP - PZ)

## \*SEGMENT 13 Approach [NVG]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Approach [NVG] (06)	Monitor Threat (Pilot) (18)	Monitor Audio (17)	Perform External Communication (27)	Monitor Threat (Copilot) (65)	Monitor Audio (17)
Adjust Approach Parameters [NVG] (52)	Perform Cockpit Communication (Pilot) (26)		Perform Before Landing Check (21)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	
	Check Aircraft Systems (Pilot) (03)			Check Aircraft Systems (Copilot) (57)	
	Check Approach Parameters [NVG] (58)				

\*Denotes segment that occurs in more than one mission phase.

## PHASE 8 Enroute (FARP - PZ)

## \*SEGMENT 14 Landing [NVG]

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
Establish Hover [NVG] (64)			Monitor Audio (17)
Perform Hover [NVG] (32)		Perform Hover [NVG] (32)	
Land Aircraft [NVG] (12)		Perform External Communication (27)	
	Perform Cockpit Communication (Pilot) (26)	Land Aircraft [NVG] (12)	Perform Cockpit Communication (Copilot) (25)
Perform After Landing Check (19)	Perform Cockpit Communication (Copilot) (25)	Perform After Landing Check (19)	Perform Cockpit Communication (Pilot) (26)

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ - AA)****\*SEGMENT 05 Contour Flight**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Monitor Threat (Pilot) (18)	Adjust Flight Parameters (01)		Monitor Threat (Copilot) (65)	Perform Navigation (33)
	Check Flight Parameters (60)	Monitor Audio (17)		Check Aircraft Systems (Copilot) (57)	Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)		Update Doppler (Stored Destination) (49)		
	Perform Cockpit Communication (Pilot) (26)		Compute Fuel Burn Rate (04)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	
			Update Doppler (Landmark) (45)		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ - AA)****\*SEGMENT 06 Contour Flight [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Monitor Threat (Pilot) (18)	Adjust Flight Parameters [NVG] (02)		Monitor Threat (Copilot) (65)	Perform Navigation [NVG] (34)
	Check Flight Parameters (60)	Monitor Audio (17)		Check Aircraft Systems (Copilot) (57)	Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)		Update Doppler (Stored Destination) [NVG] (50)		
	Perform Cockpit Communication (Pilot) (26)		Compute Fuel Burn Rate (04)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)		Update Doppler (Landmark) [NVG] (46)	Perform Cockpit Communication (Pilot) (26)	

\*Denotes segment that occurs in more than one mission phase.



**PHASE 9 Enroute (PZ - AA)****\*SEGMENT 07 Contour Flight (Threat)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Respond to Threat (41)	Monitor Threat (Pilot) (18)	Adjust Flight Parameters (01)		Monitor Threat (Copilot) (65)	Perform Navigation (33)
	Check Flight Parameters (60)	Monitor Audio (17)		Check Aircraft Systems (Copilot) (57)	Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)		Update Doppler (Stored Destination) (49)		
	Perform Cockpit Communication (Pilot) (26)		Compute Fuel Burn Rate (04)		
	Perform Cockpit Communication (Copilot) (25)		Respond to Threat (41)	Perform Cockpit Communication (Copilot) (25)	
			Perform External Communication (Threat) (28)	Perform Cockpit Communication (Pilot) (26)	
			Update Doppler (Landmark) (45)		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ - AA)****\*SEGMENT 08 Contour Flight (Threat) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Respond to Threat [NVG] (42)	Monitor Threat (Pilot) (18)	Adjust Flight Parameters [NVG] (02)		Monitor Threat (Copilot) (65)	Perform Navigation [NVG] (34)
	Check Flight Parameters (60)	Monitor Audio (17)		Check Aircraft Systems (Copilot) (57)	Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)		Update Doppler (Stored Destination) [NVG] (50)		
	Perform Cockpit Communication (Pilot) (26)		Compute Fuel Burn Rate (04)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)		Respond to Threat [NVG] (42)	Perform Cockpit Communication (Pilot) (26)	
			Perform External Communication (Threat) (28)		
			Update Doppler (Landmark) [NVG] (46)		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ - AA)****\*SEGMENT 09 Contour Flight (Mission Change)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Monitor Threat (Pilot) (18)	Adjust Flight Parameters (01)		Monitor Threat (Copilot) (65)	Perform Navigation (33)
	Check Flight Parameters (60)	Monitor Audio (17)		Check Aircraft Systems (Copilot) (57)	Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)		Update Doppler (Landmark) (45)		
	Perform Cockpit Communication (Pilot) (26)		Compute Fuel Burn Rate (04)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)		Mission Change (16)	Perform Cockpit Communication (Pilot) (26)	
			Update Doppler (Mission Change) (47)		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ - AA)****\*SEGMENT 10 Contour Flight (Mission Change) (NVG)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Monitor Threat (Pilot) (18)	Adjust Flight Parameters (NVG) (02)		Monitor Threat (Copilot) (65)	Perform Navigation (NVG) (34)
	Check Flight Parameters (60)	Monitor Audio (17)		Check Aircraft Systems (Copilot) (57)	Monitor Audio (17)
	Check Aircraft Systems (Pilot) (03)		Update Doppler (Landmark) (NVG) (46)		
	Perform Cockpit Communication (Pilot) (26)		Compute Fuel Burn Rate (04)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)		Mission Change (16)	Perform Cockpit Communication (Pilot) (26)	
			Update Doppler (Mission Change) (47)		

\*Denotes segment that occurs in more than one mission phase.

## PHASE 9 Enroute (PZ - AA)

## \*SEGMENT 11 Approach

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Approach (05) Adjust Approach Parameters (51)	Monitor Threat (Pilot) (18)	Monitor Audio (17)	Perform External Communication (27)	Monitor Threat (Copilot) (65)	Monitor Audio (17)
	Perform Cockpit Communication (Pilot) (26)		Perform Before Landing Check (21)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	
	Check Aircraft Systems (Pilot) (03)			Check Aircraft Systems (Copilot) (57)	
	Check Approach Parameters (58)				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ - AA)****\*SEGMENT 12 Landing**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Hover (63)		Monitor Audio (17)			Monitor Audio (17)
Perform Hover (29)					
Land Aircraft (11)					
	Perform Cockpit Communication (Pilot) (26)		Perform Hover (29)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)		Perform External Communication (27)	Perform Cockpit Communication (Pilot) (26)	
			Land Aircraft (11)		
Perform After Landing Check (19)			Perform After Landing Check (19)		

\*Denotes segment that occurs in more than one mission phase.

## PHASE 9 Enroute (PZ - AA)

## \* SEGMENT 13 Approach [NVG]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Establish Approach [NVG] (06)  Adjust Approach Parameters [NVG] (52)	Monitor Threat (Pilot) (18)	Monitor Audio (17)	Perform External Communication (27)	Monitor Threat (Copilot) (65)	Monitor Audio (17)
	Perform Cockpit Communication (Pilot) (26)		Perform Before Landing Check (21)	Perform Cockpit Communication (Copilot) (25)	
	Perform Cockpit Communication (Copilot) (25)			Perform Cockpit Communication (Pilot) (26)	
	Check Aircraft Systems (Pilot) (03)			Check Aircraft Systems (Copilot) (57)	
	Check Approach Parameters [NVG] (58)				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ - AA)****\*SEGMENT 14 Landing [NVG]**

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Establish Hover [NVG] (64)		Monitor Audio (17)		Monitor Audio (17)
Perform Hover [NVG] (32)			Perform Hover [NVG] (32)	
Land Aircraft [NVG] (12)			Perform External Communication (27)	
	Perform Cockpit Communication (Pilot) (26)		Land Aircraft [NVG] (12)	Perform Cockpit Communication (Copilot) (25)
Perform After Landing Check (19)	Perform Cockpit Communication (Copilot) (25)		Perform After Landing Check (19)	Perform Cockpit Communication (Pilot) (26)

\*Denotes segment that occurs in more than one mission phase.



## APPENDIX I

### CH-47D SEGMENT DECISION RULES WORKSHEETS

Once the Segment Summary Worksheets (see Appendix H) were completed for each segment, decision rules were written to describe the exact manner in which the functions must be combined to form the segment. The Segment Decision Rules Worksheets in this appendix contain the decision rules defining the sequence of the functions performed by each crewmember and the times on the mission segment timelines at which the functions begin and end.

**PHASE 1 Departure (Assembly Area)**      **SEGMENT 01 Before Takeoff (Assembly Area)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Function 24 when Function 39 ends. Function 24 lasts 23.5 seconds. Interrupt Function 24 when Function 25 or 26 occurs.	6 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 20, 27, 30, or 63.	Start Segment 01 with Function 17. Function 17 lasts until end of segment.	Start Segment 01 with Function 39. Function 39 lasts 85 seconds. Interrupt Function 39 when Function 25 or 26 occurs.  After 2.5 seconds, interrupt Function 39 and start Function 38. Function 38 lasts 389.5 seconds. After Function 38 ends, finish Function 39. Interrupt Function 38 when Function 25 or 26 occurs.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26. Functions 25 and 26 cannot occur concurrently with Functions 20, 27, 30, or 63.	Start Function 17 concurrently with Function 39. Function 17 lasts until the end of segment.
Start Function 35 when Function 24 ends. Function 35 lasts 120.5 seconds.					
Start Function 37 concurrently with Function 35. Function 37 lasts 21.5 seconds. Interrupt Function 37 when Function 25 or 26 occurs.					
Start Function 20 when Function 35 ends. Function 20 lasts 188 seconds.					
Continued...		Continued...			

**PHASE 1** Departure (Assembly Area) SEGMENT 01 Before Takeoff (Assembly Area) [Cont.]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Start Function 63 when Function 20 ends. Function 63 lasts 3 seconds.			Start Function 37 with Function 35. Function 37 lasts 21.5 seconds.	
Start Function 29 when Function 63 ends. Function 29 lasts 20 seconds.			Start Function 20 when Function 35 ends. Function 20 lasts 188 seconds.	
Start Function 30 when Function 29 ends. Function 30 lasts 42.5 seconds.			Start Function 29 3 seconds after Function 20 ends. Function 29 lasts 20 seconds.	
Start Function 29 when Function 30 ends. Function 29 lasts 57.5 seconds.			Start Function 30 when Function 29 ends. Function 30 lasts 42.5 seconds.	
			Start Function 27 when Function 30 ends. Function 27 lasts 13 seconds.	
			Continued...	

PHASE 1 Departure (Assembly Area)SEGMENT 01 Before Takeoff (Assembly Area) [Cont.]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
			<p>Start Function 23 when Function 27 ends. Function 23 lasts 35.5 seconds. Interrupt Function 23 when Function 25 or 26 occurs.</p> <p>Start Function 30 when Function 23 ends. Function 30 lasts 49 seconds.</p>		

**PHASE 1 Departure (Assembly Area)**      **SEGMENT 02 Takeoff (Assembly Area)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 02 with Function 07. Function 07 lasts 4.5 seconds.	3 times during the segment, randomly select (.50) Function 25 or Function 26.	Start Function 17 concurrently with Function 07. Function 17 lasts until end of segment.		Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.	Start Segment 02 with Function 17. Function 17 lasts until end of segment.
Start Function 53 when Function 07 ends. Function 53 lasts 30 seconds. Interrupt Function 53 when Function 03 or 18 occurs.	Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 07, 18, 59, 61, or 62.		Start Function 61 110 seconds after Segment 02 begins. Function 61 lasts 11 seconds.	2 times during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, 26, 61, or 65.	
Start Function 09 when Function 53 ends. Function 09 lasts 6 seconds.	8 times during Function 53, interrupt Function 53 and insert Function 59. Function 59 lasts 1 second.			2 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 61.	
Start Function 55 when Function 09 ends. Function 55 lasts 130 seconds. Interrupt Function 55 when Function 03 or 18 occurs.	17 times during Function 55, interrupt Function 55 and insert Function 62. Function 62 lasts 1 second.				
	Continued...				

**PHASE 1 Departure (Assembly Area)** **SEGMENT 02 Takeoff (Assembly Area) [Continued]**

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
	<p>2 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, 59, or 62.</p> <p>1 time during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, 59, or 62.</p>		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 1 Departure (Assembly Area)** **SEGMENT 03 Before Takeoff (Assembly Area) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Function 24 when Function 39 ends. Function 24 lasts 23.5 seconds. Interrupt Function 24 when Function 25 or 26 occurs.	6 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 20, 27, 31, or 64.	Start Segment 03 with Function 17 until end of segment.	Start Segment 03 with Function 39. Function 39 lasts 85 seconds. Interrupt Function 39 when Function 25 or 26 occurs.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26. Functions 25 and 26 cannot occur concurrently with Functions 20, 27, 31, or 64.	Start Function 17 concurrently with Function 39. Function 17 lasts until end of segment.
Start Function 36 when Function 24 ends. Function 36 lasts 180.5 seconds.			After 2.5 seconds, interrupt Function 39 and start Function 38. Function 38 lasts 389.5 seconds. After Function 38 ends, finish Function 39. Interrupt Function 38 when Function 25 or 26 occurs.		
Start Function 37 concurrently with Function 36. Function 37 lasts 21.5 seconds. Interrupt Function 37 when Function 25 or 26 occurs.			Start Function 24 when Function 39 ends. Function 24 lasts 23.5 seconds.		
Start Function 20 when Function 36 ends. Function 20 lasts 188 seconds.			Start Function 36 when Function 24 ends. Function 36 lasts 180.5 seconds.		
Continued...			Continued...		

**PHASE 1** Departure (Assembly Area) **SEGMENT 03** Before Takeoff (Assembly Area) [NVG]  
[Continued]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Function 64 when Function 20 ends. Function 64 lasts 4 seconds.			Start Function 37 with Function 36. Function 37 lasts 21.5 seconds. Interrupt Function 37 when Function 25 or 26 occurs.		
Start Function 32 when Function 64 ends. Function 32 lasts 30 seconds.			Start Function 20 when Function 36 ends. Function 20 lasts 188 seconds		
Start Function 31 when Function 32 ends. Function 31 lasts 42.5 seconds.			Start Function 32 4 seconds after Function 20 ends. Function 32 lasts 30 seconds.		
Start Function 32 when Function 31 ends. Function 32 lasts 78.5 seconds.			Start Function 31 when Function 32 ends. Function 31 lasts 42.5 seconds.		
			Continued...		



**PHASE 1 Departure (Assembly Area)****SEGMENT 03 Before Takeoff (Assembly Area) [NVG]  
[Continued]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
			Start Function 27 when Function 31 ends. Function 27 lasts 13 seconds.		
			Start Function 23 when Function 27 ends. Function 23 lasts 35.5 seconds. Interrupt Function 23 when Function 25 or 26 occurs.		
			Start Function 32 when Function 23 ends. Function 32 lasts 10 seconds.		

**PHASE 1 Departure (Assembly Area)**      **SEGMENT 04 Takeoff (Assembly Area) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 04 with Function 08. Function 08 lasts 5.5 seconds.	3 times during the segment, randomly select (.50) Function 25 or Function 26.	Start Function 17 concurrently with Function 08. Function 17 lasts until end of segment.		Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.	Start Segment 04 with Function 17. Function 17 lasts until end of segment.
Start Function 54 when Function 08 ends. Function 54 lasts 90 seconds. Interrupt Function 54 when Function 03 or 18 occurs.	Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 08, 18, 59, or 62.			3 times during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, 26, 61, or 65.	
Start Function 10 when Function 54 ends. Function 10 lasts 7 seconds.	8 times during Function 54, interrupt Function 54 and insert Function 59. Function 59 lasts 1 second.			3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 25, 26, 61, or 65.	
Start Function 56 when Function 10 ends. Function 56 lasts 190 seconds. Interrupt Function 56 when Function 03 or 18 occurs.	1 time during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, 59, or 62.				
			Continued...		

**PHASE 1** Departure (Assembly Area) **SEGMENT 04** Takeoff (Assembly Area) [NVG] [Cont.]

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
	<p>17 times during Function 56, interrupt Function 56 and insert Function 62. Function 62 lasts 1 second.</p> <p>1 time during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, 59, or 62.</p>	<p>Start Function 61 110 seconds after Segment 04 begins. Function 61 lasts 11 seconds.</p>	

**PHASE 2 Enroute (AA-PZ)****\* SEGMENT 05 Contour Flight**

<b>PILOT</b>			<b>COPILOT</b>		
<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>	<b>CONTINUOUS</b>	<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>	<b>CONTINUOUS</b>
	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 18, or 60.	Start Segment 05 with Function 01. Function 01 lasts until end of segment. Interrupt Function 01 when Functions 03, 18, or 60 occur.  Start Function 17 concurrently with Function 01. Function 17 lasts 600 seconds.	Start Function 49 60 seconds after Segment 05 starts. Function 49 lasts 62 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.  1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, 26, or 65.  3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 25, 26, or 57.	Start Segment 05 with Function 33. Function 33 lasts until end of segment. Interrupt Function 33 when Functions 04, 25, 26, 45, 49, 57, or 65 occur.  Start Function 17 concurrently with Function 33. Function 17 lasts 600 seconds.
	Continued...		Continued...		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 2 Enroute (AA-PZ)****\* SEGMENT 05 Contour Flight [Continued]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 01 when Function 60 occurs.		Start Function 04 200 seconds after Segment 05 starts. Function 04 lasts 45 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65. Interrupt Function 33 when Function 04 occurs.		
			Start Function 45 when Function 04 ends. After 32.5 seconds, interrupt Function 45 for 240 seconds. Function 45 lasts 85.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 2 Enroute (AA-PZ)****\* SEGMENT 06 Contour Flight [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Function 03, 18, or 60.	Start Segment 06 with Function 02. Function 02 lasts until end of segment. Interrupt Functions 03, 18, or 60 occur.	Start Function 50 60 seconds after Segment 06 starts. Function 50 lasts 62 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	Insert Function 25 each time the pilot performs Function 25 and the pilot performs Function 26.	Start Segment 06 with Function 34. Function 34 lasts until end of segment. Interrupt Function 34 when Functions 04, 25, 26, 46, 50, 57, or 65 occur.
	5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, or 26, or 60.	Start Function 17 concurrently with Function 02. Function 17 lasts 600 seconds.		1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, 26, or 65.	Start Function 17 concurrently with Function 34. Function 17 lasts 600 seconds.
	5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Function 03, 25, 26, or 60.		Continued...	3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 25, 26, or 57.	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 2 Enroute (AA-PZ)**      **\* SEGMENT 06 Contour Flight [NVG] [Continued]**

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
	100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 02 when Function 60 occurs.	Start Function 04 200 seconds after Segment 06 starts. Function 04 lasts 45 seconds. Interrupt Function 34 when Function 04 occurs. Function 04 cannot occur concurrently with Functions 25, 26, 57, or 65.	
		Start Function 46 when Function 04 ends. After 32.5 seconds, interrupt Function 46 for 240 seconds. Function 46 lasts 85.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 2 Enroute (AA-PZ)**      **\* SEGMENT 07    Contour Flight (Threat)**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Continued...	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 18, 28, or 60.  5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, 28, or 60.	Start Segment 07 with Function 01. Function 01 lasts until end of segment. Interrupt Functions 03, 18, 41, or 60 occur.  Start Function 17 concurrently with Function 01. Function 17 lasts 900 seconds.	Start Function 49 60 seconds after Segment 07 starts. Function 49 lasts 62 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.  1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, 26, 41, or 65.  3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 25, 26, 41, or 57.
			Continued...	Continued...
				Start Segment 07 with Function 33. Function 33 lasts until end of segment. Interrupt Functions 04, 25, 26, 28, 41, 45, 49, 57, and 65 occur.  Start Function 17 concurrently with Function 33. Function 17 lasts 900 seconds.

\*Denotes segment that occurs in more than one mission phase.



**PHASE 2 Enroute (AA-PZ)**      **\* SEGMENT 07    Contour Flight (Threat) [Continued]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Start Function 41 475 seconds after Segment 07 starts. Function 41 lasts 36 seconds and cannot occur concurrently with Functions 03, 18, 25, 26, or 60.	5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, 28, or 60.  300 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Functions 01 and 41 when Function 60 occurs.		Start Function 04 400 seconds after Segment 07 starts. Function 04 lasts 45 seconds. Interrupt Function 33 when Function 04 occurs. Function 04 cannot occur concurrently with Functions 25, 26, 57, or 65.  Start Function 41 when Function 41 occurs for the pilot. Interrupt Function 33 when Function 41 occurs. Function 41 lasts 36 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	
			Continued...	

\*Denotes segment that occurs in more than one mission phase.

PHASE 2 Enroute (AA-PZ)\* SEGMENT 07 Contour Flight (Threat) [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			<p>Start Function 28 when Function 41 ends. Function 28 lasts 31 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.</p> <p>Start Function 45 when Function 28 ends. After 32.5 seconds, interrupt Function 45 for 240 seconds. Function 45 lasts 85.5 seconds and cannot occur concurrently with Functions 57 or 65.</p>	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 2 Enroute (AA-PZ)****\* SEGMENT 08 Contour Flight (Threat) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Continued...	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 18, 28, or 60.  5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, 28, or 60.	Start Segment 08 with Function 02. Function 02 lasts until and of segment. Interrupt Functions 03, 18, 42, or 60 occur.  Start Function 17 concurrently with Function 02. Function 17 lasts 900 seconds.	Start Function 50 60 seconds after Segment 08 starts. Function 50 lasts 62 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.  1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, 26, 42, or 65.  3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 25, 26, 42, or 57.	Start Segment 08 with Function 34. Function 34 lasts until and of segment. Interrupt Functions 04, 25, 26, 28, 42, 46, 50, 57, or 65 occur.  Start Function 17 concurrently with Function 34. Function 17 lasts 900 seconds.
Continued...	Continued...	Continued...	Continued...	Continued...	Continued...

\*Denotes segment that occurs in more than one mission phase.

**PHASE 2 Enroute (AA-PZ)****\* SEGMENT 08 Contour Flight (Threat) [NVG] [Cont.]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Start Function 42 475 seconds after Segment 08 starts. Function 42 lasts 46 seconds and cannot occur concurrently with Functions 03, 18, 25, 26, or 60.	5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, 28, or 60.		Start Function 04 400 seconds after Segment 08 starts. Function 04 lasts 45 seconds. Interrupt Function 34 when Function 04 occurs. Function 04 cannot occur concurrently with Functions 25, 26, 57, or 65.	
	Continued...		Start Function 42 when Function 42 occurs for the pilot. Interrupt Function 34 when Function 42 occurs. Function 42 lasts 46 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	
			Continued...	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 2 Enroute (AA-PZ)****\* SEGMENT 08 Contour Flight (Threat) [NVG] [Cont.]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	300 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Functions 02 and 42 when Function 60 occurs.		Start Function 28 when Function 42 ends. Function 28 lasts 31 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.  Start Function 46 when Function 28 ends. After 32.5 seconds, interrupt Function 46 for 240 seconds. Function 46 lasts 85.5 seconds and cannot occur concurrently with Functions 57 or 65.	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 2 Enroute (AA-PZ)**      **\* SEGMENT 09**      **Contour Flight (Mission Change)**

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)
	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 16, 18, or 60.	Start Segment 09 with Function 01. Function 01 lasts until end of segment. Interrupt Functions 03, 18, or 60 occur.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.
	5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, or 60.	Start Function 17 concurrently with Function 01. Function 17 lasts 900 seconds.	1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 16, 25, 26 or 65.
	Continued...	Continued...	Continued...
			Start Segment 09 with Function 33. Function 33 lasts until end of segment. Interrupt Functions 04, 16, 25, 26, 45, 47, 57, and 65 occur.
			Start Function 17 concurrently with Function 33. Function 17 lasts 900 seconds.
			3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 16, 25, 26, or 57.
			Continued...

\*Denotes segment that occurs in more than one mission phase.

**PHASE 2 Enroute (AA-PZ)****\* SEGMENT 09 Contour Flight (Mission Change) [Cont.]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	<p>300 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 01 when Function 60 occurs.</p> <p>5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, or 26.</p>		<p>Start Function 16 600 seconds after Segment 09 starts. Interrupt Function 33 when Function 16 occurs. Function 16 lasts 74.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.</p> <p>Start Function 47 when Function 16 ends. Function 47 lasts 85 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.</p>	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 2 Enroute (AA-PZ)****\*SEGMENT 10 Contour Flight (Mission Change) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 16, 18, or 60.  5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, or 60.	Start Segment 10 with Function 02. Function 02 lasts until end of segment. Interrupt Functions 03, 18, or 60 occur.  Start Function 17 concurrently with Function 02. Function 17 lasts 900 seconds.	          Start Function 46 60 seconds after Segment 10 starts. After 32.5 seconds, interrupt Function 46 for 240 seconds. Function 46 lasts 85.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.  Start Function 04 500 seconds after Segment 10 starts. Function 04 lasts 45 seconds. Interrupt Function 34 when Function 04 occurs. Function 04 cannot occur concurrently with Functions 25, 26, 57, or 65.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.  1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 16, 25, 26, or 65.  3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 16, 25, 26, or 57.	Start Segment 10 with Function 34. Function 34 lasts until end of segment. Interrupt Functions 04, 16, 25, 26, 46, 47, 57, and 65 occur.  Start Function 17 concurrently with Function 34. Function 17 lasts 900 seconds.
	Continued		Continued		Continued

\*Denotes segment that occurs in more than one mission phase.



PHASE 2 Enroute (AA-PZ)\* SEGMENT 10      Contour Flight (Mission Change) [NVG]  
[Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	300 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 01 when Function 60 occurs.		Start Function 16 600 seconds after Segment 10 starts. Interrupt Function 34 when Function 16 occurs. Function 16 lasts 74.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	
	5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, or 26.		Start Function 47 when Function 16 ends. Function 47 lasts 85 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	

\* Denotes segment that occurs in more than one mission phase.

## PHASE 2 Enroute (AA-PZ)

## \* SEGMENT 11 Approach

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 11 with Function 05. Function 05 lasts 4.5 seconds.  Start Function 51 when Function 05 ends. Function 51 lasts 240 seconds. Interrupt Function 51 when Function 03, 18, or 58 occurs.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.  1 time during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 05, 18, 25, 26, or 58.  2 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 05, 25, 26, or 58.	Start Function 17 concurrently with Function 05. Function 17 lasts until end of segment.	Start Segment 11 with Function 27. Function 27 lasts 13 seconds.  Start Function 21 when Function 27 ends. Function 21 lasts 39 seconds.	6 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 05, 21, 27, or 58.  1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 21, 25, 26, 27, or 65.  2 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 21, 25, 26, 27, or 57.	Start Function 17 concurrently with Function 27. Function 17 lasts until end of segment.
Continued...					

\*Denotes segment that occurs in more than one mission phase.

**\*SEGMENT 11 Approach [Continued]**

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	70 times during the segment, randomly select Function 58. Function 58 lasts 1 second and cannot occur concurrently with Functions 03, 05, 18, 25, or 26. Interrupt Function 51 when Function 58 occurs.			

\*Denotes segment that occurs in more than one mission phase.

**PHASE 2 Enroute (AA-PZ)****\* SEGMENT 12 Landing**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 12 with Function 63. Function 63 lasts 3 seconds.  Start Function 29 when Function 63 ends. Function 29 lasts 120 seconds.  Start Function 11 when Function 29 ends. Function 11 lasts 13.5 seconds.  Start Function 19 when Function 11 ends. Function 19 lasts 8 seconds.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.	Start Function 17 concurrently with Function 63. Function 17 lasts until end of segment.	4 seconds after Segment 12 begins, start Function 29. Function 29 lasts 120 seconds.  Start Function 27 concurrently with Function 29. Function 27 lasts 13 seconds.  Start Function 11 when Function 29 ends. Function 11 lasts 13.5 seconds.  Start Function 19 when Function 11 ends. Function 19 lasts 13.5 seconds.	3 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Function 27 or 63.	Start Segment 12 with Function 17. Function 17 lasts until end of segment.

\*Denotes segment that occurs in more than one mission phase.

**PHASE 2 Enroute (AA-PZ)**
**\* SEGMENT 13 Approach [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 13 with Function 06. Function 06 lasts 5.5 seconds.  Start Function 52 when Function 06 ends. Function 52 lasts 340 seconds. Interrupt Function 52 when Function 03, 18, or 58 occurs.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.  1 time during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 06, 18, 25, 26, or 58.  2 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 06, 25, 26, or 58.	Start Function 17 concurrently with Function 06. Function 17 lasts until end of segment.	Start Segment 13 with Function 27. Function 27 lasts 13 seconds.  Start Function 21 when Function 27 ends. Function 21 lasts 39 seconds.	6 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 06, 21, 27, or 58.  1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 21, 25, 26, 27, or 65.  2 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 21, 25, 26, 27, or 57.	Start Function 17 concurrently with Function 27. Function 17 lasts until end of segment.
Continued...					

\* Denotes segment that occurs in more than one mission phase.

*SEGMENT	13	Approach	[NVG]	[Continued]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	20 times during the segment, randomly select Function 58. Function 58 lasts 1 second and cannot occur concurrently with Functions 03, 06, 18, 25, or 26. Interrupt Function 52 when Function 58 occurs.				

\*Denotes segment that occurs in more than one mission phase.

## PHASE 2 Enroute (AA-PZ)

## \* SEGMENT 14 Landing [NVG]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Start Segment 14 with Function 64. Function 64 lasts 4 seconds.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.	Start Function 17 concurrently with Function 64. Function 17 lasts until end of segment.	4 seconds after Segment 14 begins, Start Function 32. Function 32 lasts 220 seconds.	3 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Function 27 or 64.
Start Function 32 when Function 64 ends. Function 32 lasts 220 seconds.			Start Function 27 concurrently with Function 32. Function 27 lasts 13 seconds.	
Start Function 12 when Function 32 ends. Function 12 lasts 44 seconds.			Start Function 12 when Function 32 ends. Function 12 lasts 44 seconds.	
Start Function 19 when Function 12 ends. Function 19 lasts 8 seconds.			Start Function 19 when Function 12 ends. Function 19 lasts 8 seconds.	
				Start Segment 14 with Function 17. Function 17 lasts until end of segment.

\* Denotes segment that occurs in more than one mission phase.

**PHASE 3 Departure (PZ)****SEGMENT 15 Before Takeoff (Internal Load)**

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
<p>Start Function 23 when Function 27 ends. Function 23 lasts 33.5 seconds.</p>	<p>3 seconds after Segment 14 starts, 3 times randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Function 27. When selected, program Functions 25 and 26 to interrupt Functions 13, 23, and 48.</p>	<p>Start Segment 15 with Function 48. Function 48 lasts 8.5 seconds.</p> <p>Start Function 13 when Function 48 ends. Function 13 lasts 73 seconds.</p> <p>Start Function 27 when Function 13 ends. Function 27 lasts 13 seconds.</p> <p>Start Function 23 when Function 27 ends. Function 23 lasts 33.5 seconds.</p>	<p>Insert Function 25 each time the Pilot performs Function 25 and Function 26 each time the Pilot performs Function 26.</p>
			<p>Start Function 17 concurrently with Function 48. Function 17 lasts until end of segment.</p>



## PHASE 3 Departure (PZ)

## \* SEGMENT 16 Takeoff

PILOT			COPilot		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 16 with Function 63. Function 63 lasts 3 seconds.	5 times during the segment, randomly select (.50) Function 25 or Function 26.	Start Function 17 concurrently with Function 63. Function 17 lasts until end of segment.	3 seconds after Segment 16 begins, start Function 29. Function 29 lasts 30 seconds.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.	Start Segment 16 with Function 17. Function 17 lasts until end of segment.
Start Function 29 when Function 63 ends. Function 29 lasts 30 seconds. Interrupt Function 29 when Function 03 or 18 occurs.	Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 07, 09, 18, 59, 61, 62, or 63.			3 times during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, 26, 61, or 65.	
Start Function 07 when Function 29 ends. Function 07 lasts 4.5 seconds.	8 times during Function 53, interrupt Function 53 and insert Function 59. Function 59 lasts 1 second.			3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 61.	
Start Function 53 when Function 07 ends. Function 53 lasts 20 seconds. Interrupt Function 53 when Function 03, 18, or 59 occurs.	2 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, 59, or 62.		Continued...		
Continued...	Continued...				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 3 Departure (PZ)****\* SEGMENT 16 Takeoff [Continued]**

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
Start Function 09 when Function 53 ends. Function 09 lasts 6 seconds.	17 times during Function 55, interrupt Function 55 and insert Function 62. Function 62 lasts 1 second.	Start Function 61 80 seconds after Segment 16 begins. Function 61 lasts 11 seconds.	
Start Function 55 when Function 09 ends. Function 55 lasts 30 seconds. Interrupt Function 55 when Function 03 18, or 62 occurs.	2 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, 59, or 62.		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 3 Departure (PZ)****\* SEGMENT 17 Takeoff [NVG]**

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
Start Segment 17 with Function 64. Function 64 lasts 4 seconds.	5 times during the segment, randomly select (.50) Function 25 or Function 26.	4 seconds after Segment 17 begins, start Function 32. Function 32 lasts 120 seconds.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.
Start Function 32 when Function 64 ends. Function 32 lasts 120 seconds. Interrupt Function 32 when Function 03 or 18 occurs.	Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 08, 10, 18, 59, 61, 62, or 64.		3 times during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, or 26, 61, or 65.
Start Function 08 when Function 32 ends. Function 08 lasts 5.5 seconds.	8 times during Function 54, interrupt Function 54 and insert Function 59. Function 59 lasts 1 second.	Start Function 61 180 seconds after Segment 17 starts. Function 61 lasts 11 seconds.	3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 61.
Start Function 54 when Function 08 ends. Function 54 lasts 30 seconds. Interrupt Function 54 when Function 03, 18, or 59 occurs.	1 time during the segment, randomly select (.50) Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 08, 10, 18, 25, 26, 59, 61, 62, or 64.		
Continued...	Continued...		
			Start Segment 17 with Function 17. Function 17 lasts until end of segment.

\*Denotes segment that occurs in more than one mission phase.

**PHASE 3 Departure (PZ)****\* SEGMENT 17 Takeoff (NVG) [Continued]**

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
<p>Start Function 10 when Function 54 ends. Function 10 lasts 7 seconds.</p> <p>Start Function 56 when Function 10 ends. Function 56 lasts 30 seconds. Interrupt Function 56 when Function 03, 18, or 62 occurs.</p>	<p>17 times during Function 56, interrupt Function 56 and insert Function 62. Function 62 lasts 1 second.</p> <p>1 time during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 08, 10, 25, 26, 59, 61, 62, or 64.</p>		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 3 Departure (PZ)****SEGMENT 18 Before Takeoff (External Load)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Function 23 when Function 13 ends. Function 23 lasts 35.5 seconds.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.	Start Segment 18 with Function 17. Function 17 lasts until end of segment.  Start Segment 18 with Function 66. Function 66 lasts until end of segment. Function 66 is interrupted by Function 14.	Start Segment 18 with Function 48. Function 48 lasts 8.5 seconds.	3 times during the segment, randomly select (.50) Function 25 or Function 26.  Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 14, 27, or 48. When selected, program Functions 25 and 26 to interrupt Functions 13 and 23.	Start Function 17 concurrently with Function 48. Function 17 lasts until end of segment.
			Start Function 13 when Function 48 ends. Function 13 lasts 73 seconds.  Start Function 23 when Function 13 ends. Function 23 lasts 35.5 seconds.  Start Function 27 when Function 23 ends. Function 27 lasts 13 seconds.  Start Function 14 when Function 27 ends. Function 14 lasts 250 seconds.		
Start Function 14 when Function 27 ends. Function 14 lasts 250 seconds.  Interrupt Function 66 when Function 14 occurs.					

**PHASE 3 Departure (PZ)****SEGMENT 19 Takeoff (External)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 19 with Function 07. Function 07 lasts 4.5 seconds.	3 times during the segment, randomly select (.50) Function 25 or Function 26.	Start Function 17 concurrently with Function 07. Function 17 lasts until end of segment.		Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.	Start Segment 19 with Function 17. Function 17 lasts until end of segment.
Start Function 53 when Function 07 ends. Function 53 lasts 30 seconds. Interrupt Function 53 when Function 03, 18, or 59 occurs.	Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 07, 09, 18, 59, or 62.			3 times during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, 26, 61, or 65.	
Start Function 09 when Function 53 ends. Function 09 lasts 6 seconds.	8 times during Function 53, interrupt Function 53 and insert Function 59. Function 59 lasts 1 second.				
Start Function 55 when Function 09 ends. Function 55 lasts 130 seconds. Interrupt Function 55 when Function 03, 18, or 62 occurs.	3 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 07, 09, 18, 25, 26, 59, or 62.		Start Function 61 45 seconds after Segment 19 begins. Function 61 lasts 11 seconds.	3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 61.	
Continued...					

**PHASE 3 Departure (PZ)**      **SEGMENT 19 Takeoff (External)**      **[Continued]**

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	<p>17 times during Function 55, interrupt Function 55 and insert Function 62. Function 62 lasts 1 second.</p> <p>3 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 07, 09, 25, 26, 59, or 62.</p>			

**PHASE 3 Departure (PZ)****SEGMENT 20 Before Takeoff (External Load) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Function 23 when Function 13 ends. Function 23 lasts 35.5 seconds.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.	Start Segment 20 with Function 17. Function 17 lasts until end of segment.  Start Segment 20 with Function 66. Function 66 lasts until end of segment. Function 66 is interrupted by Function 15.	Start Segment 20 with Function 48. Function 48 lasts 8.5 seconds.	5 times during the segment, randomly select (.50) Function 25 or Function 26.  Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 15, 27, or 48. When selected, program Functions 25 and 26 to interrupt Functions 13 and 23.	Start Function 17 concurrently with Function 48. Function 17 lasts until end of segment.
			Start Function 13 when Function 48 ends. Function 13 lasts 73 seconds.  Start Function 23 when Function 13 ends. Function 23 lasts 35.5 seconds.  Start Function 27 when Copilot Function 23 ends. Function 27 lasts 13 seconds.  Start Function 15 when Function 27 ends. Function 15 lasts 350 seconds.		
Start Function 15 when Function 27 ends. Function 15 lasts 350 seconds.	Interrupt Function 66 when Function 15 occurs.				



**PHASE 3 Departure (PZ)****SEGMENT 21 Takeoff (External) [NVG]**

<b>PILOT</b>			<b>COPILOT</b>		
<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>	<b>CONTINUOUS</b>	<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>	<b>CONTINUOUS</b>
Start Segment 21 with Function 08. Function 08 lasts 5.5 seconds.	3 times during the segment, randomly select (.50) Function 25 or Function 26.	Start Function 17 concurrently with Function 08. Function 17 lasts until end of segment.		Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.	Start Segment 21 with Function 17. Function 17 lasts until end of segment.
Start Function 54 when Function 08 ends. Function 54 lasts 90 seconds. Interrupt Function 54 when Function 03, 18, or 59 occurs.	Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 08, 10, 18, 59, or 62.			3 times during the segment, randomly select Function 57.	
Start Function 10 when Function 54 ends. Function 10 lasts 7 seconds.	8 times during Function 54, interrupt Function 54 and insert Function 59. Function 59 lasts 1 second.		Start Function 61 110 seconds after Segment 21 starts. Function 61 lasts 11 seconds.	Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, 26, 61, or 65.	
Start Function 56 when Function 10 ends. Function 56 lasts 190 seconds. Interrupt Function 56 when Function 03, 18, or 62 occurs.	3 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 08, 10, 18, 25, 26, 59, or 62.			3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 61.	
Continued...					

PHASE 3 Departure (PZ)SEGMENT 21 Takeoff (External) [NVG] [Continued]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	<p>17 times during Function 56, interrupt Function 56 and insert Function 62. Function 62 lasts 1 second.</p> <p>3 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 08, 10, 25, 26, 59, or 62.</p>				

**PHASE 4 Enroute (PZ-LZ)****\* SEGMENT 22 NOE Flight**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 18, or 60.	Start Segment 22 with Function 01. Function 01 lasts until end of segment. Interrupt Function 01 when Function 03, 18, or 60 occurs.		Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.	Start Segment 22 with Function 33. Function 33 lasts until end of segment. Interrupt Function 33 when Functions 04, 25, 26, 57, or 65 occur.
	5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, or 60.	Start Function 17 concurrently with Function 01. Function 17 lasts 600 seconds.		1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 04, 25, 26, or 65.	Start Function 17 concurrently with Function 33. Function 17 lasts 600 seconds.
	5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, or 60.		Start Function 04 500 seconds after Segment 22 starts. Function 04 lasts 45 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65. Interrupt Function 33 when Function 04 occurs.	3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 04, 25, 26, or 57.	
	Continued...				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 4 Enroute (PZ-LZ)****\* SEGMENT 22 NOE Flight [Continued]**

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
	<p>100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 01 when Function 60 occurs.</p>		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 4 Enroute (PZ-LZ)****\* SEGMENT 23 NOE Flight [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 18, or 60.	Start Segment 23 with Function 02. Function 02 lasts until end of segment. Interrupt Function 02 when Function 03, 18, or 60 occurs.		Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.  1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 04, 25, 26, or 65.	Start Segment 23 with Function 34. Function 34 lasts until end of segment. Interrupt Function 34 when Functions 04, 25, 26, 57, or 65 occur.  Start Function 17 concurrently with Function 34. Function 17 lasts 600 seconds.
	5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, or 60.	Start Function 17 concurrently with Function 02. Function 17 lasts 600 seconds.	Start Function 04 500 seconds after Segment 23 starts. Function 04 lasts 45 seconds and cannot occur concurrently with Functions 18, 25, 26, 57, or 65. Interrupt Function 34 when Function 04 occurs.	3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 04, 25, 26, or 57.	
	Continued...				

\*Denotes segment that occurs in more than one mission phase.

## \*SEGMENT 23 NOE Flight [NVG] [Continued]

\*Denotes segment that occurs in more than one mission phase.

**PHASE 4 Enroute (PZ-LZ)****\* SEGMENT 24 NOE Flight (Threat)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Function 41 500 seconds after Segment 24 starts. Function 41 lasts 36 seconds and cannot occur concurrently with Functions 03, 25, 26, or 60. Interrupt Function 01 when Function 41 occurs.	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 18, 28, 41, or 60. 5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, 41, or 60.	Start Segment 24 with Function 01. Function 01 lasts until end of segment. Interrupt Function 01 when Function 03, 18, 41, or 60 occurs. Start Function 17 concurrently with Function 01. Function 17 lasts 700 seconds.	Start Function 41 when Function 41 occurs for the pilot. Interrupt Function 33 when Function 41 occurs. Function 41 lasts 36 seconds and cannot occur concurrently with Functions 18, 25, 26, 57, or 65. Start Function 28 when Function 41 ends. Function 28 lasts 31 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26. 1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 04, 25, 26, 28, 41, or 65. 3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 04, 25, 26, 41, or 57.	Start Segment 24 with Function 33. Function 33 lasts until the end of segment. Interrupt Function 33 when Functions 04, 25, 26, 28, 41, 57, or 65 occur. Start Function 17 concurrently with Function 33. Function 17 lasts 700 seconds.
	Continued		Continued		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 4 Enroute (PZ-LZ)****\* SEGMENT 24 NOE Flight (Threat) [Continued]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	<p>5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, 41, or 60.</p> <p>100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 01 when Function 60 occurs.</p>		<p>Start Function 04 600 seconds after Segment 24 starts. Function 04 lasts 45 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65. Interrupt Function 33 when Function 04 occurs.</p>	

\*Denotes segment that occurs in more than one mission phase.



**PHASE 4 Enroute (PZ-LZ)****\* SEGMENT 25 NOE Flight (Threat) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Function 42 500 seconds after Segment 25 starts. Function 42 lasts 46 seconds and cannot occur concurrently with Functions 03, 25, 26, or 60. Interrupt Function 02 when Function 42 occurs.	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 18, 28, 42, or 60. 5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, 42, or 60.	Start Segment 25 with Function 02. Function 02 lasts until end of segment. Interrupt Function 02 when Function 03, 18, 42, or 60 occurs. Start Function 17 concurrently with Function 02. Function 17 lasts 700 seconds.	Start Function 42 when Function 42 occurs for the pilot. Interrupt Function 34 when Function 42 occurs. Function 42 lasts 46 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65. Start Function 28 when Function 42 ends. Function 28 lasts 31 seconds and cannot occur concurrently with Functions 25, 26, 28, 34, 57, or 65.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26. 1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 04, 25, 26, 28, 42, or 65. 3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 04, 25, 26, 28, 42, or 57.	Start Segment 25 with Function 34. Function 34 lasts until the end of segment. Interrupt Function 34 when Functions 04, 25, 26, 28, 42, 57, or 65 occur. Start Function 17 concurrently with Function 34. Function 17 lasts 700 seconds.
	Continued...		Continued...		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 4 Enroute (PZ-LZ)****\* SEGMENT 25 NOE Flight (Threat) [NVG] [Continued]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	<p>5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, 42, or 60.</p> <p>100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 02 when Function 60 occurs.</p>		<p>Start Function 04 600 seconds after Segment 25 starts. Function 04 lasts 45 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65. Interrupt Function 34 when Function 04 occurs.</p>	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 4 Enroute (PZ-LZ)****\* SEGMENT 26 NOE Flight (Mission Change)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.	Start Segment 26 with Function 01. Function 01 lasts until end of segment. Interrupt Function 01 when Function 03, 18, or 60 occurs.	Start Function 16 400 seconds after Segment 26 starts. Function 16 lasts 74.5 seconds and cannot occur concurrently with Function 25, 26, 57, or 65.	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 04, 16, 47, 57, or 65.	Start Segment 26 with Function 33. Function 33 lasts until end of segment. Interrupt Functions 04, 16, 25, 26, 47, 57, or 65 occur.
	5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, or 60.	Start Function 17 concurrently with Function 01. Function 17 lasts 700 seconds.	Start Function 47 when Function 16 ends. Function 47 lasts 85 seconds and cannot occur concurrently with Function 25, 26, 57, or 65.	1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 04, 16, 25, 26, 47, or 65.	Start Function 17 concurrently with Function 31. Function 17 lasts 700 seconds.
	5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, or 60.		Continued...	Continued...	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 4 Enroute (PZ-LZ)****\* SEGMENT 26 NOE Flight (Mission Change) [Cont.]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 01 when Function 60 occurs.		Start Function 04 600 seconds after Segment 26 starts. Function 04 lasts 45 seconds. Interrupt Function 33 when Function 04 occurs. Function 04 cannot occur concurrently with Functions 25, 26, 57, or 65.	3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 04, 16, 25, 26, 47, or 57.

\*Denotes segment that occurs in more than one mission phase.

**PHASE 4 Enroute (PZ-LZ)****\* SEGMENT 27 NOE Flight (Mission Change) [NVG]**

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
	<p>Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.</p> <p>5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, or 60.</p> <p>5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, or 60.</p> <p>Continued...</p>	<p>Start Function 16 400 seconds after Segment 27 starts. Function 16 lasts 74.5 seconds and cannot occur concurrently with Functions 04, 25, 26, 57, or 65.</p> <p>Start Function 47 when Function 16 ends. Function 47 lasts 85 seconds and cannot occur concurrently with Function 25, 26, 57, or 65.</p> <p>Continued...</p>	<p>15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 04, 16, 47, 57, or 65.</p> <p>1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.</p> <p>Continued...</p>
	<p>Start Segment 27 with Function 02. Function 02 lasts until end of segment. Interrupt Function 02 when Function 03, 18, or 60 occurs.</p> <p>Start Function 17 concurrently with Function 02. Function 17 lasts 700 seconds.</p>	<p>Start Segment 27 with Function 34. Function 34 lasts until end of segment. Interrupt Function 34 when Functions 04, 16, 25, 26, 47, 57, or 65 occur.</p> <p>Start Function 17 concurrently with Function 34. Function 17 lasts 700 seconds.</p>	<p>Start Segment 27 with Function 34. Function 34 lasts until end of segment. Interrupt Function 34 when Functions 04, 16, 25, 26, 47, 57, or 65 occur.</p> <p>Start Function 17 concurrently with Function 34. Function 17 lasts 700 seconds.</p>

\*Denotes segment that occurs in more than one mission phase.

**PHASE 4 Enroute (PZ-LZ)**      **\*SEGMENT 27**      **NOE Flight (Mission Change) [NVG]**  
**[Continued]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 02 when Function 60 occurs.		Start Function 04 600 seconds after Segment 27 starts. Function 04 lasts 45 seconds. Interrupt Function 34 when Function 04 occurs. Function 04 cannot occur concurrently with Functions 25, 26, 47, or 65.	3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 04, 16, 25, 26, 47, or 57.	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 4 Enroute (PZ-LZ)****SEGMENT 28 Approach (LZ)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 28 with Function 05. Function 05 lasts 4.5 seconds.  Start Function 51 when Function 05 ends. Function 51 lasts 240 seconds. Interrupt Function 51 when Function 03, 18, or 58 occurs.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.  1 time during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 05, 18, 25, 26, or 58.  2 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 05, 25, 26, or 58.	Start Function 17 concurrently with Function 05. Function 17 lasts until end of segment.	Start Segment 28 with Function 22. Function 22 lasts 26 seconds.	6 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 05, 22, 57, 58, or 65.  1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 22, 25, 26, or 65.  2 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 22, 25, 26, or 57.	Start Function 17 concurrently with Function 22. Function 17 lasts until end of segment.
Continued...					

**SEGMENT 28      Approach (LZ)      [Continued]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	20 times during the segment, randomly select Function 58. Function 58 lasts 1 second and cannot occur concurrently with Functions 03, 05, 18, 25, or 26. Interrupt Function 51 when Function 58 occurs.				



**PHASE 4 Enroute (PZ-LZ)**      **SEGMENT 29**      **Landing (LZ, Internal Load)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 29 with Function 63. Function 63 lasts 3 seconds.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.	Start Function 17 concurrently with Function 63. Function 17 lasts until end of segment.	3 seconds after Segment 29 begins, start Function 29. Function 29 lasts 120 seconds.	3 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 43 or 63.	Start Segment 29 with Function 17. Function 17 lasts until end of segment.
Start Function 29 when Function 63 ends. Function 29 lasts 120 seconds.			Start Function 11 when Function 29 ends. Function 11 lasts 13.5 seconds.		
Start Function 11 when Function 29 ends. Function 11 lasts 13.5 seconds.			Start Function 43 when Function 11 ends. Function 43 lasts 21 seconds.		

**PHASE 4 Enroute (PZ-LZ)**      **SEGMENT 30 Landing (LZ, External Load)**

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Start Segment 30 with Function 63. Function 63 lasts 3 seconds.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.	Start Function 17 concurrently with Function 63. Function 17 lasts until end of segment.	3 seconds after Segment 30 begins, start Function 29. Function 29 lasts 120 seconds.	4 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 43, 44, or 63.
Start Function 29 when Function 63 ends. Function 29 lasts 120 seconds.				
Start Function 44 when Function 29 ends. Function 44 lasts 9.5 seconds.				
Start Function 11 when Function 44 ends. Function 11 lasts 13.5 seconds.			Start Function 11 when Function 44 ends. Function 11 lasts 13.5 seconds.	
			Start Function 43 when Function 11 ends. Function 43 lasts 21 seconds.	
				Start Segment 29 with Function 17. Function 17 lasts until end of segment.

## PHASE 4 Enroute (PZ-LZ)

## SEGMENT 31 Approach (LZ) [NVG]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 31 with Function 06. Function 06 lasts 5.5 seconds.  Start Function 52 when Function 06 ends. Function 52 lasts 340 seconds. Interrupt Function 52 when Function 03, 18, or 58 occurs.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.  1 time during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 06, 18, 25, 26, or 58.  2 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 06, 25, 26, or 58.	Start Function 17 concurrently with Function 05. Function 17 lasts until end of segment.	Start Segment 31 with Function 22. Function 22 lasts 26 seconds.	6 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 06, 22, or 58.  1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 22, 25, 26, or 65.  2 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 22, 25, 26, or 57.	Start Function 17 concurrently with Function 22. Function 17 lasts until end of segment.
Continued...					

**SEGMENT 31      Approach (LZ) [NVG]      [Continued]**

I-60

**PHASE 4 Enroute (PZ-LZ)**      **SEGMENT 32 Landing (LZ, Internal Load) [NVG]**

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
Start Segment 32 with Function 64. Function 64 lasts 4 seconds.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.	4 seconds after Segment 32 begins, start Function 32. Function 32 lasts 220 seconds.	3 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 43 or 64.
Start Function 32 when Function 64 ends. Function 32 lasts 220 seconds.	Start Function 17 concurrently with Function 64. Function 17 lasts until end of segment	Start Function 12 when Function 32 ends. Function 12 lasts 44 seconds.	Start Segment 32 with Function 17. Function 17 lasts until end of segment.
Start Function 12 when Function 32 ends. Function 12 lasts 44 seconds.		Start Function 43 when Function 12 ends. Function 43 lasts 21 seconds.	

**PHASE 4 Enroute (PZ-LZ)**      **SEGMENT 33**      **Landing (LZ, External Load) [NVG]**

PILOT				COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 33 with Function 64. Function 64 lasts 4 seconds.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.	Start Function 17 concurrently with Function 64. Function 17 lasts until end of segment	4 seconds after Segment 33 begins, start Function 32. Function 32 lasts 220 seconds.	3 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 43, 44, or 64.	Start Segment 32 with Function 17. Function 17 lasts until end of segment.
Start Function 32 when Function 64 ends. Function 32 lasts 220 seconds.					
Start Function 44 when Function 32 ends. Function 44 lasts 9.5 seconds.					
Start Function 12 when Function 44 ends. Function 12 lasts 44 seconds.			Start Function 12 when Function 44 ends. Function 12 lasts 44 seconds.		
			Start Function 43 when Function 12 ends. Function 43 lasts 21 seconds.		

**PHASE 5 Departure (LZ)****SEGMENT 34 Before Takeoff (LZ)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
8.5 seconds after Segment 34 begins, start Function 23. Function 23 lasts 33.5 seconds. Interrupt Function 23 when Functions 25 or 26 occur.	1 time during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently. Interrupt Function 23 when Functions 25 or 26 occur.	Start Function 17 concurrently with Function 23. Function 17 lasts until end of segment.	Start Function 48 concurrently with Function 17. Function 48 lasts 8.5 seconds. Start Function 23 when Function 48 ends. Function 23 lasts 33.5 seconds.	Insert Function 25 each time the Pilot performs Function 25 and the Pilot performs Function 26.	Start Segment 34 with Function 17. Function 17 lasts until end of segment.

**PHASE 5 Departure (LZ)****\*SEGMENT 16 Takeoff**

PILOT			COPilot		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 16 with Function 63. Function 63 lasts 3 seconds.	5 times during the segment, randomly select (.50) Function 25 or Function 26.	Start Function 17 concurrently with Function 63. Function 17 lasts until end of segment.	3 seconds after Segment 16 begins, start Function 29. Function 29 lasts 30 seconds.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.	Start Segment 16 with Function 17. Function 17 lasts until end of segment.
Start Function 29 when Function 63 ends. Function 29 lasts 30 seconds. Interrupt Function 29 when Function 03 or 18 occurs.	Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 07, 09, 18, 59, 61, 62, or 63.			3 times during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, 26, 61, or 65.	
Start Function 07 when Function 29 ends. Function 07 lasts 4.5 seconds.	8 times during Function 53, interrupt Function 53 and insert Function 59. Function 59 lasts 1 second.			3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 61.	
Start Function 53 when Function 07 ends. Function 53 lasts 20 seconds. Interrupt Function 53 when Function 03, 18, or 59 occurs.	2 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, 59, or 62.		Continued...		
Continued...	Continued...				

\*Denotes segment that occurs in more than one mission phase.



**PHASE 5 Departure (LZ)****\* SEGMENT 16 Takeoff [Continued]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Function 09 when Function 53 ends. Function 09 lasts 6 seconds.	17 times during Function 55, interrupt Function 55 and insert Function 62. Function 62 lasts 1 second.		Start Function 61 80 seconds after Segment 16 begins. Function 61 lasts 11 seconds.		
Start Function 55 when Function 09 ends. Function 55 lasts 30 seconds. Interrupt Function 55 when Function 03 18, or 62 occurs.	2 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, 59, or 62.				

\*Denotes segment that occurs in more than one mission phase.

## \* SEGMENT 17 Takeoff [NVG]

## PHASE 5 Departure (LZ)

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 17 with Function 64. Function 64 lasts 4 seconds.	5 times during the segment, randomly select (.50) Function 25 or Function 26.	Start Function 17 concurrently with Function 64. Function 17 lasts until end of segment.	4 seconds after Segment 17 begins, start Function 32. Function 32 lasts 120 seconds.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.	Start Segment 17 with Function 17. Function 17 lasts until end of segment.
Start Function 32 when Function 64 ends. Function 32 lasts 120 seconds. Interrupt Function 32 when Function 03 or 18 occurs.	Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 08, 10, 18, 59, 61, 62, or 64.			3 times during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, or 26, 61, or 65.	
Start Function 08 when Function 32 ends. Function 08 lasts 5.5 seconds.	8 times during Function 54, interrupt Function 54 and insert Function 59. Function 59 lasts 1 second.		Start Function 61 180 seconds after Segment 17 starts. Function 61 lasts 11 seconds.	3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 61.	
Start Function 54 when Function 08 ends. Function 54 lasts 30 seconds. Interrupt Function 54 when Function 03, 18, or 59 occurs.	1 time during the segment, randomly select (.50) Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 08, 10, 18, 25, 26, 59, 61, 62, or 64.				
Continued...	Continued...				

\* Denotes segment that occurs in more than one mission phase.

**PHASE 5 Departure (LZ)**

\* SEGMENT 17 Takeoff [NVG] [Continued]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
<p>Start Function 10 when Function 54 ends. Function 10 lasts 7 seconds.</p> <p>Start Function 56 when Function 10 ends. Function 56 lasts 30 seconds. Interrupt Function 56 when Function 03, 18, or 62 occurs.</p>	<p>17 times during Function 56, interrupt Function 56 and insert Function 62. Function 62 lasts 1 second.</p> <p>1 time during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 08, 10, 25, 26, 59, 61, 62, or 64.</p>				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ-PZ) or (LZ-FARP)****\* SEGMENT 22 NOE Flight**

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)
	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 18, or 60.	Start Segment 22 with Function 01. Function 01 lasts until end of segment. Interrupt Function 01 when Function 03, 18, or 60 occurs.	
	5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, or 60.	Start Function 17 concurrently with Function 01. Function 17 lasts 600 seconds.	
	5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, or 60.		Start Function 04 500 seconds after Segment 22 starts. Function 04 lasts 45 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65. Interrupt Function 33 when Function 04 occurs.
Continued...			
			Insert Function 25 each time the pilot performs Function 25 and the pilot performs Function 26.
		1 time during the segment, randomly select Function 57.	
		Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 04, 25, 26, or 65.	
		3 times during the segment, randomly select Function 65.	
		Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 04, 25, 26, or 57.	
			Start Segment 22 with Function 33. Function 33 lasts until end of segment. Interrupt Function 33 when Functions 04, 25, 26, 57, or 65 occur.
			Start Function 17 concurrently with Function 33. Function 17 lasts 600 seconds.

\*Denotes segment that occurs in more than one mission phase.

PHASE 6 Enroute (LZ-PZ) or (LZ-FARP)\* SEGMENT 22 NOE Flight [Continued]

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 01 when Function 60 occurs.				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ-PZ) or (LZ-FARP)****\*SEGMENT 23 NOE Flight [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 18, or 60.	Start Segment 23 with Function 02. Function 02 lasts until end of segment. Interrupt Function 02 when Function 03, 18, or 60 occurs.		Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.	Start Segment 23 with Function 34. Function 34 lasts until end of segment. Interrupt Function 34 when Functions 04, 25, 26, 57, or 65 occur.
	5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, or 60.	Start Function 17 concurrently with Function 02. Function 17 lasts 600 seconds.		1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 04, 25, 26, or 65.	Start Function 17 concurrently with Function 34. Function 17 lasts 600 seconds.
	5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, or 60.		Start Function 04 500 seconds after Segment 23 starts. Function 04 lasts 45 seconds and cannot occur concurrently with Functions 18, 25, 26, 57, or 65. Interrupt Function 34 when Function 04 occurs.	3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 04, 25, 26, or 57.	
	Continued...				

\*Denotes segment that occurs in more than one mission phase.

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 02 when Function 60 occurs.			

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ-PZ) or (LZ-FARP)****\* SEGMENT 24 NOE Flight (Threat)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Function 41 500 seconds after Segment 24 starts. Function 41 lasts 36 seconds and cannot occur concurrently with Functions 03, 25, 26, or 60. Interrupt Function 01 when Function 41 occurs.	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 18, 28, 41, or 60. 5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, 41, or 60.	Start Segment 24 with Function 01. Function 01 lasts until end of segment. Interrupt Function 01 when Function 03, 18, 41, or 60 occurs. Start Function 17 concurrently with Function 01. Function 17 lasts 700 seconds.	Start Function 41 when Function 41 occurs for the pilot. Interrupt Function 33 when Function 41 occurs. Function 41 lasts 36 seconds and cannot occur concurrently with Functions 18, 25, 26, 57, or 65. Start Function 28 when Function 41 ends. Function 28 lasts 31 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26. 1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 04, 25, 26, 28, 41, or 65. 3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 04, 25, 26, 41, or 57.	Start Segment 24 with Function 33. Function 33 lasts until the end of segment. Interrupt Function 33 when Functions 04, 25, 26, 28, 41, 57, or 65 occur. Start Function 17 concurrently with Function 33. Function 17 lasts 700 seconds.
	Continued...		Continued...		

\* Denotes segment that occurs in more than one mission phase.



**PHASE 6 Enroute (LZ-PZ) or (LZ-FARP)**      **\* SEGMENT 24 NOE Flight (Threat)** [Continued]

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)
	<p>5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, 41, or 60.</p> <p>100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 01 when Function 60 occurs</p>		<p>Start Function 04 600 seconds after Segment 24 starts. Function 04 lasts 45 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65. Interrupt Function 33 when Function 04 occurs.</p>
			CONTINUOUS

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ-PZ) or (LZ-FARP)****\* SEGMENT 25 NOE Flight (Threat) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Function 42 500 seconds after Segment 25 starts. Function 42 lasts 46 seconds and cannot occur concurrently with Functions 03, 25, 26, or 60. Interrupt Function 02 when Function 42 occurs.	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 18, 28, 42, or 60. 5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, 42, or 60.	Start Segment 25 with Function 02. Function 02 lasts until end of segment. Interrupt Function 02 when Function 03, 18, 42, or 60 occurs. Start Function 17 concurrently with Function 02. Function 17 lasts 700 seconds.	Start Function 42 when Function 42 occurs for the pilot. Interrupt Function 34 when Function 42 occurs. Function 42 lasts 46 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65. Start Function 28 when Function 42 ends. Function 28 lasts 31 seconds and cannot occur concurrently with Functions 25, 26, 28, 34, 57, or 65.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26. 1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 04, 25, 26, 28, 42, or 65. 3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 04, 25, 26, 28, 42, or 57.	Start Segment 25 with Function 34. Function 34 lasts until the end of segment. Interrupt Function 34 when Functions 04, 25, 26, 28, 42, 57, or 65 occur. Start Function 17 concurrently with Function 34. Function 17 lasts 700 seconds.
	Continued...		Continued...		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ-PZ) or (LZ-FARP)****\*SEGMENT 25 NOE Flight (Threat) [NVG] [Continued]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	<p>5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, 42, or 60.</p> <p>100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 02 when Function 60 occurs.</p>		<p>Start Function 04 600 seconds after Segment 25 starts. Function 04 lasts 45 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65. Interrupt Function 34 when Function 04 occurs.</p>	

\*Denotes segment that occurs in more than one mission phase.

## \* SEGMENT 26 NOE Flight (Mission Change)

## PHASE 6 Enroute (LZ-PZ) or (LZ-FARP)

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	<p>Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.</p> <p>5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, or 60.</p> <p>5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, or 60.</p> <p>Continued...</p>	<p>Start Segment 26 with Function 01. Function 01 lasts until end of segment. Interrupt Function 01 when Function 03, 18, or 60 occurs.</p> <p>Start Function 17 concurrently with Function 01. Function 17 lasts 700 seconds.</p>	<p>Start Function 16 400 seconds after Segment 26 starts. Function 16 lasts 74.5 seconds and cannot occur concurrently with Function 25, 26, 57, or 65.</p> <p>Start Function 47 when Function 16 ends. Function 47 lasts 85 seconds and cannot occur concurrently with Function 25, 26, 57, or 65.</p> <p>Continued...</p>	<p>15 times during the segment, randomly select (.50) Function 25 or Function 26.</p> <p>Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 04, 16, 47, 57, or 65.</p> <p>1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 04, 16, 25, 26, 47, or 65.</p> <p>Continued...</p>
		<p>Start Segment 26 with Function 33. Function 33 lasts until end of segment. Interrupt Functions 04, 16, 25, 26, 47, 57, or 65 occur.</p> <p>Start Function 17 concurrently with Function 31. Function 17 lasts 700 seconds.</p>		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ-PZ) or (LZ-FARP)**      **\* SEGMENT 26    NOE Flight (Mission Change) [Cont.]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 01 when Function 60 occurs.		Start Function 04 600 seconds after Segment 26 starts. Function 04 lasts 45 seconds. Interrupt Function 33 when Function 04 occurs. Function 04 cannot occur concurrently with Functions 25, 26, 57, or 65.	3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 04, 16, 25, 26, 47, or 57.

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ-PZ) or (LZ-FARP)**

**\* SEGMENT 27 NOE Flight (Mission Change) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	<p>Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.</p> <p>5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, or 60.</p> <p>5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, or 60.</p>	<p>Start Segment 27 with Function 02. Function 02 lasts until end of segment. Interrupt Function 02 when Function 03, 18, or 60 occurs.</p> <p>Start Function 17 concurrently with Function 02. Function 17 lasts 700 seconds.</p>	<p>Start Function 16 400 seconds after Segment 27 starts. Function 16 lasts 74.5 seconds and cannot occur concurrently with Functions 04, 25, 26, 57, or 65.</p> <p>Start Function 47 when Function 16 ends. Function 47 lasts 85 seconds and cannot occur concurrently with Function 25, 26, 57, or 65.</p>	<p>15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 04, 16, 47, 57, or 65.</p> <p>1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.</p>	<p>Start Segment 27 with Function 34. Function 34 lasts until end of segment. Interrupt Function 34 when Functions 04, 16, 25, 26, 47, 57, or 65 occur.</p> <p>Start Function 17 concurrently with Function 34. Function 17 lasts 700 seconds.</p>
	Continued...		Continued...	Continued...	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ-PZ) or (LZ-FARP)**      **\* SEGMENT 27**      **NOE Flight (Mission Change) [NVG]**  
**[Continued]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 02 when Function 60 occurs.		Start Function 04 600 seconds after Segment 27 starts. Function 04 lasts 45 seconds. Interrupt Function 34 when Function 04 occurs. Function 04 cannot occur concurrently with Functions 25, 26, 47, or 65.	3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 04, 16, 25, 26, 47, or 57.

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ-PZ) or (LZ-FARP)****\* SEGMENT 11 Approach**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 11 with Function 05. Function 05 lasts 4.5 seconds.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.	Start Function 17 concurrently with Function 05. Function 17 lasts until end of segment.	Start Segment 11 with Function 27. Function 27 lasts 13 seconds.	6 times during the segment, randomly select (.50) Function 25 or Function 26.	Start Function 17 concurrently with Function 27. Function 17 lasts until end of segment.
Start Function 51 when Function 05 ends. Function 51 lasts 240 seconds. Interrupt Function 51 when Function 03, 18, or 58 occurs.	1 time during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 05, 18, 25, 26, or 58.		Start Function 21 when Function 27 ends. Function 21 lasts 39 seconds.	Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 05, 21, 27, or 58.	
	2 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 05, 25, 26, or 58.			1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 21, 25, 26, 27, or 65.	
				2 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 21, 25, 26, 27, or 57.	
	Continued				

\*Denotes segment that occurs in more than one mission phase.





**PHASE 6 Enroute (LZ-PZ) or (LZ-FARP)****\* SEGMENT 12 Landing**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 12 with Function 63. Function 63 lasts 3 seconds.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.	Start Function 17 concurrently with Function 63. Function 17 lasts until end of segment.	4 seconds after Segment 12 begins, start Function 29. Function 29 lasts 120 seconds.	3 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Function 27 or 63.	Start Segment 12 with Function 17. Function 17 lasts until end of segment.
Start Function 29 when Function 63 ends. Function 29 lasts 120 seconds.			Start Function 27 concurrently with Function 29. Function 27 lasts 13 seconds.		
Start Function 11 when Function 29 ends. Function 11 lasts 13.5 seconds.			Start Function 11 when Function 29 ends. Function 11 lasts 13.5 seconds.		
Start Function 19 when Function 11 ends. Function 19 lasts 8 seconds.			Start Function 19 when Function 11 ends. Function 19 lasts 13.5 seconds.		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ-PZ) or (LZ-FARP)****\* SEGMENT 13 Approach [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 13 with Function 06. Function 06 lasts 5.5 seconds.  Start Function 52 when Function 06 ends. Function 52 lasts 340 seconds. Interrupt Function 52 when Function 03, 18, or 58 occurs.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.  1 time during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 06, 18, 25, 26, or 58.  2 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 06, 25, 26, or 58.	Start Function 17 concurrently with Function 06. Function 17 lasts until end of segment.	Start Segment 13 with Function 27. Function 27 lasts 13 seconds.  Start Function 21 when Function 27 ends. Function 21 lasts 39 seconds.	6 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 06, 21, 27, or 58.  1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 21, 25, 26, 27, or 65.  2 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 21, 25, 26, 27, or 57.	Start Function 17 concurrently with Function 27. Function 17 lasts until end of segment.
Continued...					

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ-PZ) or (LZ-FARP)**      **\* SEGMENT 13 Approach [NVG] [Continued]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	20 times during the segment, randomly select Function 58. Function 58 lasts 1 second and cannot occur concurrently with Functions 03, 06, 18, 25, or 26. Interrupt Function 52 when Function 58 occurs.				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 6 Enroute (LZ-PZ) or (LZ-FARP)****\* SEGMENT 14 Landing [NVG]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Start Segment 14 with Function 64. Function 64 lasts 4 seconds.  Start Function 32 when Function 64 ends. Function 32 lasts 220 seconds.  Start Function 12 when Function 32 ends. Function 12 lasts 44 seconds.  Start Function 19 when Function 12 ends. Function 19 lasts 8 seconds.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.	Start Function 17 concurrently with Function 64. Function 17 lasts until end of segment.	4 seconds after Segment 14 begins, Start Function 32. Function 32 lasts 220 seconds.  Start Function 27 concurrently with Function 32. Function 27 lasts 13 seconds.  Start Function 12 when Function 32 ends. Function 12 lasts 44 seconds.  Start Function 19 when Function 12 ends. Function 19 lasts 8 seconds.	3 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Function 27 or 64.
				Start Segment 14 with Function 17. Function 17 lasts until end of segment.

\*Denotes segment that occurs in more than one mission phase.

## PHASE 7 FARP Operations

## SEGMENT 35 FARP Procedures

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 35 with Function 35. Function 35 lasts 120.5 seconds.	Start Function 17 concurrently with Function 35. Function 17 lasts until end of segment.	Start Function 17 concurrently with Function 35. Function 17 lasts until end of segment.	Start Segment 35 with Function 35. Function 35 lasts 120.5 seconds.	Start Function 17 concurrently with Function 35. Function 17 lasts until end of segment.	Start Function 17 concurrently with Function 35. Function 17 lasts until end of segment.
Start Function 40 when Function 35 ends. Function 40 lasts 308 seconds. Interrupt Function 40 when Functions 25 or 26 occur.	10 times during Functions 35 and 40, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each.	Start Function 40 when Function 35 ends. Function 40 lasts 308 seconds. Interrupt Function 40 when Functions 25 or 26 occur.	Start Function 40 when Function 35 ends. Function 40 lasts 308 seconds. Interrupt Function 40 when Functions 25 or 26 occur.	Insert Function 25 each time the Pilot performs Function 25 and the Pilot performs Function 26.	Start Function 17 concurrently with Function 35. Function 17 lasts until end of segment.
Start Function 24 when Function 40 ends. Function 24 lasts 23.5 seconds. Interrupt Function 24 when Functions 25 or 26 occur.	3 times during Function 35, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each.	Start Function 24 when Function 40 ends. Function 24 lasts 23.5 seconds. Interrupt Function 24 when Functions 25 or 26 occur.	Start Function 24 when Function 40 ends. Function 24 lasts 23.5 seconds. Interrupt Function 24 when Functions 25 or 26 occur.	Start Function 24 when Function 40 ends. Function 24 lasts 23.5 seconds. Interrupt Function 24 when Functions 25 or 26 occur.	Start Function 17 concurrently with Function 35. Function 17 lasts until end of segment.
Start Function 35 when Function 24 ends. Function 35 lasts 120.5 seconds.	3 times during Function 35, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each.	Start Function 35 when Function 24 ends. Function 35 lasts 120.5 seconds.	Start Function 35 when Function 24 ends. Function 35 lasts 120.5 seconds.	Start Function 35 when Function 24 ends. Function 35 lasts 120.5 seconds.	Start Function 17 concurrently with Function 35. Function 17 lasts until end of segment.

**PHASE 7 FARP Operations****SEGMENT 36 FARP Procedures [NVG]**

<b>PILOT</b>			<b>COPILOT</b>		
<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>	<b>CONTINUOUS</b>	<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>	<b>CONTINUOUS</b>
Start Segment 36 with Function 36. Function 36 lasts 180.5 seconds.	Start Function 17 concurrently with Function 36. Function 17 lasts until end of segment.	Start Function 17 concurrently with Function 36. Function 17 lasts until end of segment.	Start Segment 36 with Function 36. Function 36 lasts 180.5 seconds.	Start Function 17 concurrently with Function 36. Function 17 lasts until end of segment.	Start Function 17 concurrently with Function 36. Function 17 lasts until end of segment.
Start Function 40 when Function 36 ends. Function 40 lasts 308 seconds. Interrupt Function 40 when Functions 25 or 26 occur.	10 times during Functions 36 and 40, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each.	Start Function 40 when Function 36 ends. Function 40 lasts 308 seconds. Interrupt Function 40 when Functions 25 or 26 occur.	Start Function 40 when Function 36 ends. Function 40 lasts 308 seconds. Interrupt Function 40 when Functions 25 or 26 occur.	Insert Function 25 each time the Pilot performs Function 25 and Function 26 each time the Pilot performs Function 26.	Start Function 17 concurrently with Function 36. Function 17 lasts until end of segment.
Start Function 24 when Function 40 ends. Function 24 lasts 23.5 seconds. Interrupt Function 24 when Functions 25 or 26 occur.	3 times during Function 36, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each.	Start Function 24 when Function 40 ends. Function 24 lasts 23.5 seconds. Interrupt Function 24 when Functions 25 or 26 occur.	Start Function 24 when Function 40 ends. Function 24 lasts 23.5 seconds. Interrupt Function 24 when Functions 25 or 26 occur.	Start Function 24 when Function 40 ends. Function 24 lasts 23.5 seconds. Interrupt Function 24 when Functions 25 or 26 occur.	Start Function 17 concurrently with Function 36. Function 17 lasts until end of segment.
Start Function 36 when Function 24 ends. Function 36 lasts 180.5 seconds.	Start Function 36 when Function 24 ends. Function 36 lasts 180.5 seconds.	Start Function 36 when Function 24 ends. Function 36 lasts 180.5 seconds.	Start Function 36 when Function 24 ends. Function 36 lasts 180.5 seconds.	Start Function 36 when Function 24 ends. Function 36 lasts 180.5 seconds.	Start Function 17 concurrently with Function 36. Function 17 lasts until end of segment.

**SEGMENT 37    Before Takeoff (FARP)**

**PHASE 7   FARP Operations**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Function 23 when Function 48 ends. Function 23 lasts 35.5 seconds. Interrupt Function 23 when Functions 25 or 26 occur.	1 time during Function 23, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each. Interrupt Function 23 when Functions 25 or 26 occur.	Start Segment 37 with Function 17. Function 17 lasts until end of segment.	Start Segment 37 with Function 27. Function 27 lasts 13 seconds.  Start Function 48 when Function 27 ends. Function 48 lasts 8.5 seconds.  Start Function 23 when Function 48 ends. Function 23 lasts 33.5 seconds.	Insert Function 25 each time the Pilot performs Function 25 and Function 26 each time the Pilot performs Function 26.	Start Function 17 concurrently with Function 27. Function 17 lasts until the end of segment.



## PHASE 7 FARP Operations

## \* SEGMENT 16 Takeoff

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 16 with Function 63. Function 63 lasts 3 seconds.	5 times during the segment, randomly select (.50) Function 25 or Function 26.	Start Function 17 concurrently with Function 63. Function 17 lasts until end of segment.	3 seconds after Segment 16 begins, start Function 29. Function 29 lasts 30 seconds.	Insert Function 25 each time the pilot performs Function 25 and the pilot performs Function 26.	Start Segment 16 with Function 17. Function 17 lasts until end of segment.
Start Function 29 when Function 63 ends. Function 29 lasts 30 seconds. Interrupt Function 29 when Function 03 or 18 occurs.	Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 07, 09, 18, 59, 61, 62, or 63.			3 times during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, 26, 61, or 65.	
Start Function 07 when Function 29 ends. Function 07 lasts 4.5 seconds.	8 times during Function 53, interrupt Function 53 and insert Function 59. Function 59 lasts 1 second.			3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 61.	
Start Function 53 when Function 07 ends. Function 53 lasts 20 seconds. Interrupt Function 53 when Function 03, 18, or 59 occurs.	2 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, 59, or 62.		Continued...		
Continued...	Continued...				

\* Denotes segment that occurs in more than one mission phase.

## PHASE 7 FARP Operations

## \* SEGMENT 16 Takeoff [Continued]

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	DISCRETE (FIXED)	DISCRETE (RANDOM)
Start Function 09 when Function 53 ends. Function 09 lasts 6 seconds.	17 times during Function 55, interrupt Function 55 and insert Function 62. Function 62 lasts 1 second.	Start Function 61 80 seconds after Segment 16 begins. Function 61 lasts 11 seconds.	
Start Function 55 when Function 09 ends. Function 55 lasts 30 seconds. Interrupt Function 55 when Function 03 18, or 62 occurs.	2 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, 59, or 62.		

\*Denotes segment that occurs in more than one mission phase.

## PHASE 7 FARP Operations

## \* SEGMENT 17 Takeoff [NVG]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Start Segment 17 with Function 64. Function 64 lasts 4 seconds.	5 times during the segment, randomly select (.50) Function 25 or Function 26.	Start Function 17 concurrently with Function 64. Function 17 lasts until end of segment.	4 seconds after Segment 17 begins, start Function 32. Function 32 lasts 120 seconds.	Insert Function 25 each time the pilot performs Function 25 and the pilot performs Function 26.
Start Function 32 when Function 64 ends. Function 32 lasts 120 seconds. Interrupt Function 32 when Function 03 or 18 occurs.	Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 08, 10, 18, 59, 61, 62, or 64.			3 times during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, or 26, 61, or 65.
Start Function 08 when Function 32 ends. Function 08 lasts 5.5 seconds.	8 times during Function 54, interrupt Function 54 and insert Function 59. Function 59 lasts 1 second.		Start Function 61 180 seconds after Segment 17 starts. Function 61 lasts 11 seconds.	3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 61.
Start Function 54 when Function 08 ends. Function 54 lasts 30 seconds. Interrupt Function 54 when Function 03, 18, or 59 occurs.	1 time during the segment, randomly select (.50) Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 08, 10, 18, 25, 26, 59, 61, 62, or 64.			
Continued...	Continued...			

\* Denotes segment that occurs in more than one mission phase.

**PHASE 7 FARP Operations****\* SEGMENT 17 Takeoff [NVG] [Continued]**

<b>PILOT</b>			<b>COPILOT</b>		
<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>	<b>CONTINUOUS</b>	<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>	<b>CONTINUOUS</b>
<p>Start Function 10 when Function 54 ends. Function 10 lasts 7 seconds.</p> <p>Start Function 56 when Function 10 ends. Function 56 lasts 30 seconds. Interrupt Function 56 when Function 03, 18, or 62 occurs.</p>	<p>17 times during Function 56, interrupt Function 56 and insert Function 62. Function 62 lasts 1 second.</p> <p>1 time during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 08, 10, 25, 26, 59, 61, 62, or 64.</p>				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 8 Enroute (FARP-PZ)****\* SEGMENT 22 NOE Flight**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 18, or 60.	Start Segment 22 with Function 01. Function 01 lasts until end of segment. Interrupt Function 01 when Function 03, 18, or 60 occurs.  Start Function 17 concurrently with Function 01. Function 17 lasts 600 seconds.		Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.  1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 04, 25, 26, or 65.  3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 04, 25, 26, or 57.	Start Segment 22 with Function 33. Function 33 lasts until end of segment. Interrupt Function 33 when Functions 04, 25, 26, 57, or 65 occur.  Start Function 17 concurrently with Function 33. Function 17 lasts 600 seconds.
	5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, or 60.  5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, or 60.		Start Function 04 500 seconds after Segment 22 starts. Function 04 lasts 45 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65. Interrupt Function 33 when Function 04 occurs.		
	Continued...				

\*Denotes segment that occurs in more than one mission phase.

PILOT		COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)
	100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 01 when Function 60 occurs.		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 8 Enroute (FARP-PZ)****\* SEGMENT 23 NOE Flight [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 18, or 60.	Start Segment 23 with Function 02. Function 02 lasts until end of segment. Interrupt Function 02 when Function 03, 18, or 60 occurs.  Start Function 17 concurrently with Function 02. Function 17 lasts 600 seconds.		Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.  1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 04, 25, 26, or 65.  3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 04, 25, 26, or 57.	Start Segment 23 with Function 34. Function 34 lasts until end of segment. Interrupt Function 34 when Functions 04, 25, 26, 57, or 65 occur.  Start Function 17 concurrently with Function 34. Function 17 lasts 600 seconds.
	5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, or 60.  5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, or 60.  Continued...		Start Function 04 500 seconds after Segment 23 starts. Function 04 lasts 45 seconds and cannot occur concurrently with Functions 18, 25, 26, 57, or 65. Interrupt Function 34 when Function 04 occurs.		

\*Denotes segment that occurs in more than one mission phase.

PHASE 6      Terminal Operations      \*SEGMENT 13      Landing

PILOT			GUNNER		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 13 with Function 162. Function 162 lasts 8 seconds.	3 times during the segment, randomly select (.50) Function 078 or 079. Functions 078 and 079 last 7 seconds each and cannot occur concurrently with Function 018 or 104. Interrupt Function 085 whenever Function 078 or 079 occurs.	Start Function 083 concurrently with Function 162. Function 083 lasts throughout the segment.		3 times during the segment, randomly select (.50) Function 078 or 079. Functions 078 and 079 last 7 seconds each and cannot occur concurrently with Function 018 or 104. Interrupt Function 085 whenever Function 078 or 079 occurs.	Start Function 083 concurrently with Function 162. Function 083 lasts throughout the segment.
Continued...	2 times during the segment, randomly select Function 018. Function 018 lasts 7.5 seconds and cannot occur concurrently with Function 078, 079, or 104. Interrupt Functions 080, 085, 105, 162, and 163 whenever Function 018 occurs.	Start Function 105 when Function 162 ends. Function 162 lasts 120 seconds.		2 times during the segment, randomly select Function 017. Function 017 lasts 11 seconds and cannot occur concurrently with Function 078 or 079.	
		Continued...			

\*Denotes segment that occurs in more than one mission phase.



\*SEGMENT 13 Landing [Continued]

PHASE 6 Terminal Operations

PILOT			GUNNER	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Start Function 080 when Function 105 ends. Function 080 lasts 14 seconds.		Start Function 163 when Function 080 ends. Function 163 lasts throughout the remainder of the segment.		
Start Function 104 when Function 080 ends. Function 104 lasts 28 seconds.				
Start Function 085 when Function 104 ends. Function 085 lasts 27 seconds.				

\*Denotes segment that occurs in more than one mission phase.

PHASE 7	Postflight	SEGMENT 51	Engine Shutdown
---------	------------	------------	-----------------

PILOT			GUNNER		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 51 with Function 089. Function 089 lasts 6.5 seconds.	2 times during the segment, randomly select (.50) Function 078 or 079. Functions 078 and 079 last 7 seconds each. Program the functions to interrupt any ongoing discrete fixed function.	Start Function 083 concurrently with Function 089. Function 083 lasts throughout the segment.	Start Segment 51 with Function 129. Function 129 lasts 20 seconds.	2 times during the segment, randomly select (.50) Function 078 or 079. Functions 078 and 079 last 7 seconds each. Program the functions to interrupt any ongoing discrete fixed function.	Start Function 083 concurrently with Function 129. Function 083 lasts throughout the segment.
Start Function 146 when Function 089 ends. Function 146 lasts 14.5 seconds.			Start Function 109 when Function 129 ends. Function 109 lasts 24.5 seconds.		
Start Function 130 when Function 146 ends. Function 130 lasts 13.5 seconds.					
Start Function 145 when Function 130 ends. Function 145 lasts 23.5 seconds.					
Start Function 110 when Function 145 ends. Function 110 lasts 56.5 seconds.					

PHASE 7      Postflight      SEGMENT 52      Before Leaving Aircraft

PILOT			GUNNER		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
<p>Start Segment 52 with Function 049. Function 049 lasts 211 seconds.</p> <p>Start Function 128 when Function 049 ends. Function 128 lasts 290 seconds.</p>			<p>Start Segment 52 with Function 051. Function 051 lasts 274 seconds.</p> <p>Standby 227 seconds</p>		

**PHASE 8 Enroute (FARP-PZ)**      **\*SEGMENT 25 NOE Flight (Threat) [NVG] [Continued]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	<p>5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, 42, or 60.</p> <p>100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 02 when Function 60 occurs.</p>		<p>Start Function 04 600 seconds after Segment 25 starts. Function 04 lasts 45 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65. Interrupt Function 34 when Function 04 occurs.</p>	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 8 Enroute (FARP-PZ)****\* SEGMENT 26 NOE Flight (Mission Change)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.	Start Segment 26 with Function 01. Function 01 lasts until end of segment. Interrupt Function 01 when Function 03, 18, or 60 occurs.	Start Function 16 400 seconds after Segment 26 starts. Function 16 lasts 74.5 seconds and cannot occur concurrently with Function 25, 26, 57, or 65.	15 times during the segment, randomly select ( 50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 04, 16, 47, 57, or 65.	Start Segment 26 with Function 33. Function 33 lasts until end of segment. Interrupt Functions 04, 16, 25, 26, 47, 57, or 65 occur.
	5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, or 60.	Start Function 17 concurrently with Function 01. Function 17 lasts 700 seconds.	Start Function 47 when Function 16 ends. Function 47 lasts 85 seconds and cannot occur concurrently with Function 25, 26, 57, or 65.	1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 04, 16, 25, 26, 47, or 65.	Start Function 17 concurrently with Function 31. Function 17 lasts 700 seconds.
	Continued...		Continued...	Continued...	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 8 Enroute (FARP-PZ)****\* SEGMENT 26 NOE Flight (Mission Change) [Cont.]**

PILOT			COPilot		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 01 when Function 60 occurs.		Start Function 04 600 seconds after Segment 26 starts. Function 04 lasts 45 seconds. Interrupt Function 33 when Function 04 occurs. Function 04 cannot occur concurrently with Functions 25, 26, 57, or 65.	3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 04, 16, 25, 26, 47, or 57.	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 8 Enroute (FARP-PZ)****\* SEGMENT 27 NOE Flight (Mission Change) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.	Start Segment 27 with Function 02. Function 02 lasts until end of segment. Interrupt Function 02 when Function 03, 18, or 60 occurs.	Start Function 16 400 seconds after Segment 27 starts. Function 16 lasts 74.5 seconds and cannot occur concurrently with Functions 04, 25, 26, 57, or 65.	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 04, 16, 47, 57, or 65.	Start Segment 27 with Function 34. Function 34 lasts until end of segment. Interrupt Function 34 when Functions 04, 16, 25, 26, 47, 57, or 65 occur.
	5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, or 60.	Start Function 17 concurrently with Function 02. Function 17 lasts 700 seconds.	Start Function 47 when Function 16 ends. Function 47 lasts 85 seconds and cannot occur concurrently with Function 25, 26, 57, or 65.	1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	Start Function 17 concurrently with Function 34. Function 17 lasts 700 seconds.
	Continued...		Continued...	Continued...	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 8 Enroute (FARP-PZ)**      **\*SEGMENT 27**      **NOE Flight (Mission Change) [NVG]**  
**[Continued]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 02 when Function 60 occurs.		Start Function 04 600 seconds after Segment 27 starts. Function 04 lasts 45 seconds. Interrupt Function 34 when Function 04 occurs. Function 04 cannot occur concurrently with Functions 25, 26, 47, or 65.	3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 04, 16, 25, 26, 47, or 57.

\*Denotes segment that occurs in more than one mission phase.



**PHASE 8 Enroute (FARP-PZ)****\* SEGMENT 11 Approach**

<b>PILOT</b>			<b>COPilot</b>		
<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>	<b>CONTINUOUS</b>	<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>	<b>CONTINUOUS</b>
Start Segment 11 with Function 05. Function 05 lasts 4.5 seconds.  Start Function 51 when Function 05 ends. Function 51 lasts 240 seconds. Interrupt Function 51 when Function 03, 18, or 58 occurs.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.  1 time during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 05, 18, 25, 26, or 58.  2 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 05, 25, 26, or 58.	Start Function 17 concurrently with Function 05. Function 17 lasts until end of segment.	Start Segment 11 with Function 27. Function 27 lasts 13 seconds.  Start Function 21 when Function 27 ends. Function 21 lasts 39 seconds.	6 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 05, 21, 27, or 58.  1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 21, 25, 26, 27, or 65.  2 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 21, 25, 26, 27, or 57.	Start Function 17 concurrently with Function 27. Function 17 lasts until end of segment.
Continued...					

\*Denotes segment that occurs in more than one mission phase.

**PHASE 8 Enroute (FARP-PZ)****\* SEGMENT 11 Approach [Continued]**

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	70 times during the segment, randomly select Function 58. Function 58 lasts 1 second and cannot occur concurrently with Functions 03, 05, 18, 25, or 26. Interrupt Function 51 when Function 58 occurs.			

\*Denotes segment that occurs in more than one mission phase.

**PHASE 8 Enroute (FARP-PZ)****\*SEGMENT 12 Landing**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 12 with Function 63. Function 63 lasts 3 seconds.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.	Start Function 17 concurrently with Function 63. Function 17 lasts until end of segment.	4 seconds after Segment 12 begins, start Function 29. Function 29 lasts 120 seconds.	3 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Function 27 or 63.	Start Segment 12 with Function 17. Function 17 lasts until end of segment.
Start Function 29 when Function 63 ends. Function 29 lasts 120 seconds.			Start Function 27 concurrently with Function 29. Function 27 lasts 13 seconds.		
Start Function 11 when Function 29 ends. Function 11 lasts 13.5 seconds.			Start Function 11 when Function 29 ends. Function 11 lasts 13.5 seconds.		
Start Function 19 when Function 11 ends. Function 19 lasts 8 seconds.			Start Function 19 when Function 11 ends. Function 19 lasts 13.5 seconds.		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 8 Enroute (FARP-PZ)****\* SEGMENT 13 Approach [NVG]**

PILOT				COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 13 with Function 06. Function 06 lasts 5.5 seconds.  Start Function 52 when Function 06 ends. Function 52 lasts 340 seconds. Interrupt Function 52 when Function 03, 18, or 58 occurs.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.  1 time during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 06, 18, 25, 26, or 58.  2 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 06, 25, 26, or 58.	Start Function 17 concurrently with Function 06. Function 17 lasts until end of segment.	Start Segment 13 with Function 27. Function 27 lasts 13 seconds.  Start Function 21 when Function 27 ends. Function 21 lasts 39 seconds.	6 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 06, 21, 27, or 58.  1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 21, 25, 26, 27, or 65.  2 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 21, 25, 26, 27, or 57.	Start Function 17 concurrently with Function 27. Function 17 lasts until end of segment.
Continued...					

\*Denotes segment that occurs in more than one mission phase.

**\* SEGMENT 13    Approach [NVG]    [Continued]**

PILOT			COPILLOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	<p>20 times during the segment, randomly select Function 58. Function 58 lasts 1 second and cannot occur concurrently with Functions 03, 06, 18, 25, or 26. Interrupt Function 52 when Function 58 occurs.</p>				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 8 Enroute (FARP-PZ)****\*SEGMENT 14 Landing [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 14 with Function 64. Function 64 lasts 4 seconds.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.	Start Function 17 concurrently with Function 64. Function 17 lasts until end of segment.	4 seconds after Segment 14 begins, Start Function 32. Function 32 lasts 220 seconds.	3 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Function 27 or 64.	Start Segment 14 with Function 17. Function 17 lasts until end of segment.
Start Function 32 when Function 64 ends. Function 32 lasts 220 seconds.			Start Function 27 concurrently with Function 32. Function 27 lasts 13 seconds.		
Start Function 12 when Function 32 ends. Function 12 lasts 44 seconds.			Start Function 12 when Function 32 ends. Function 12 lasts 44 seconds.		
Start Function 19 when Function 12 ends. Function 19 lasts 8 seconds.			Start Function 19 when Function 12 ends. Function 19 lasts 8 seconds.		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ-AA)****\* SEGMENT 05 Contour Flight**

<b>PILOT</b>			<b>COPILOT</b>		
<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>	<b>CONTINUOUS</b>	<b>DISCRETE (FIXED)</b>	<b>DISCRETE (RANDOM)</b>	<b>CONTINUOUS</b>
	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 18, or 60.	Start Segment 05 with Function 01. Function 01 lasts until end of segment. Interrupt Function 01 when Functions 03, 18, or 60 occur.	Start Function 49 60 seconds after Segment 05 starts. Function 49 lasts 62 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	Insert Function 25 each time the pilot performs Function 25 and the pilot performs Function 26.	Start Segment 05 with Function 33. Function 33 lasts until end of segment. Interrupt Function 33 when Functions 04, 25, 26, 45, 49, 57, or 65 occur.
	5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, or 60.	Start Function 17 concurrently with Function 01. Function 17 lasts 600 seconds.		1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, 26, or 65.	Start Function 17 concurrently with Function 33. Function 17 lasts 600 seconds.
	5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Function 03, 25, 26, or 60.		Continued...	3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 25, 26, or 57.	
	Continued...				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ-AA)****\* SEGMENT 05 Contour Flight [Continued]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 01 when Function 60 occurs.		Start Function 04 200 seconds after Segment 05 starts. Function 04 lasts 45 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65. Interrupt Function 33 when Function 04 occurs.	
			Start Function 45 when Function 04 ends. After 32.5 seconds, interrupt Function 45 for 240 seconds. Function 45 lasts 85.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	

\*Denotes segment that occurs in more than one mission phase.



**PHASE 9 Enroute (PZ-AA)****\*SEGMENT 06 Contour Flight [NVG]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Function 03, 18, or 60.	Start Segment 06 with Function 02. Function 02 lasts until end of segment. Interrupt Functions 03, 18, or 60 occur.  Start Function 17 concurrently with Function 02. Function 17 lasts 600 seconds.	Start Function 50 60 seconds after Segment 06 starts. Function 50 lasts 62 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.  1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, 26, or 65.  3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 25, 26, or 57.
	5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, or 26, or 60.			Start Segment 06 with Function 34. Function 34 lasts until end of segment. Interrupt Functions 04, 25, 26, 46, 50, 57, or 65 occur.  Start Function 17 concurrently with Function 34. Function 17 lasts 600 seconds.
	5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Function 03, 25, 26, or 60.		Continued...	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ-AA)****\* SEGMENT 06 Contour Flight [NVG] [Continued]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 02 when Function 60 occurs.		Start Function 04 200 seconds after Segment 06 starts. Function 04 lasts 45 seconds. Interrupt Function 34 when Function 04 occurs. Function 04 cannot occur concurrently with Functions 25, 26, 57, or 65.  Start Function 46 when Function 04 ends. After 32.5 seconds, interrupt Function 46 for 240 seconds. Function 46 lasts 85.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.		

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ-AA)****\* SEGMENT 07 Contour Flight (Threat)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 18, 28, or 60.	Start Segment 07 with Function 01. Function 01 lasts until end of segment. Interrupt Functions 03, 18, 41, or 60 occur.  Start Function 17 concurrently with Function 01. Function 17 lasts 900 seconds.	Start Function 49 60 seconds after Segment 07 starts. Function 49 lasts 62 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.  1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, 26, 41, or 65.  3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 25, 26, 41, or 57.	Start Segment 07 with Function 33. Function 33 lasts until end of segment. Interrupt Function 33 when Functions 04, 25, 26, 28, 41, 45, 49, 57, and 65 occur.  Start Function 17 concurrently with Function 33. Function 17 lasts 900 seconds.
Continued...	Continued...		Continued...	Continued...	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ-AA)****\* SEGMENT 07 Contour Flight (Threat) [Continued]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
<p>Start Function 41 475 seconds after Segment 07 starts. Function 41 lasts 36 seconds and cannot occur concurrently with Functions 03, 18, 25, 26, or 60.</p> <p>5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, 28, or 60.</p> <p>300 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Functions 01 and 41 when Function 60 occurs.</p>	<p>5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, 28, or 60.</p> <p>300 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Functions 01 and 41 when Function 60 occurs.</p>		<p>Start Function 04 400 seconds after Segment 07 starts. Function 04 lasts 45 seconds. Interrupt Function 33 when Function 04 occurs. Function 04 cannot occur concurrently with functions 25, 26, 57, or 65.</p> <p>Start Function 41 when Function 41 occurs for the pilot. Interrupt Function 33 when Function 41 occurs. Function 41 lasts 36 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.</p>	
			Continued...	

\*Denotes segment that occurs in more than one mission phase.

PHASE 9 Enroute (PZ-AA)\* SEGMENT 07 Contour Flight (Threat) [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
			<p>Start Function 28 when Function 41 ends. Function 28 lasts 31 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.</p> <p>Start Function 45 when Function 28 ends. After 32.5 seconds, interrupt Function 45 for 240 seconds. Function 45 lasts 85.5 seconds and cannot occur concurrently with Functions 57 or 65.</p>	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ-AA)****\* SEGMENT 08 Contour Flight (Threat) [NVG]**

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 18, 28, or 60.	Start Segment 08 with Function 02. Function 02 lasts until and of segment. Interrupt Functions 03, 18, 42, or 60 occur.  Start Function 17 concurrently with Function 02. Function 17 lasts 900 seconds.	Start Function 50 60 seconds after Segment 08 starts. Function 50 lasts 62 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.  1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 25, 26, 42, or 65.  3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 25, 26, 42, or 57.
Continued...	Continued...		Continued...	Continued...
				Start Segment 08 with Function 34. Function 34 lasts until and of segment. Interrupt Functions 04, 25, 26, 28, 42, 46, 50, 57, or 65 occur.  Start Function 17 concurrently with Function 34. Function 17 lasts 900 seconds.

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ-AA)****\* SEGMENT 08 Contour Flight (Threat) [NVG] [Cont.]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
Start Function 42 475 seconds after Segment 08 starts. Function 42 lasts 46 seconds and cannot occur concurrently with Functions 03, 18, 25, 26, or 60.	5 times during the segment, randomly select Function 18 Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, 28, or 60.		Start Function 04 400 seconds after Segment 08 starts. Function 04 lasts 45 seconds. Interrupt Function 34 when Function 04 occurs. Function 04 cannot occur concurrently with Functions 25, 26, 57, or 65.  Start Function 42 when Function 42 occurs for the pilot. Interrupt Function 34 when Function 42 occurs. Function 42 lasts 46 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	
	Continued...		Continued...	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ-AA)****\* SEGMENT 08 Contour Flight (Threat) [NVG] [Cont.]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	300 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Functions 02 and 42 when Function 60 occurs.		Start Function 28 when Function 42 ends. Function 28 lasts 31 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.  Start Function 46 when Function 28 ends. After 32.5 seconds, interrupt Function 46 for 240 seconds. Function 46 lasts 85.5 seconds and cannot occur concurrently with Functions 57 or 65.	

\*Denotes segment that occurs in more than one mission phase.



**PHASE 9 Enroute (PZ-AA)****\* SEGMENT 09 Contour Flight (Mission Change)**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 16, 18, or 60.	Start Segment 09 with Function 01. Function 01 lasts until end of segment. Interrupt Functions 03, 18, or 60 occur.	Start Function 45 60 seconds after Segment 09 starts. After 32.5 seconds, interrupt Function 45 for 240 seconds. Function 45 lasts 85.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.  1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 16, 25, 26 or 65.	Start Segment 09 with Function 33. Function 33 lasts until end of segment. Interrupt Functions 04, 16, 25, 26, 45, 47, 57, and 65 occur.  Start Function 17 concurrently with Function 33. Function 17 lasts 900 seconds.
	5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, or 60.	Start Function 17 concurrently with Function 01. Function 17 lasts 900 seconds.	Start Function 04 500 seconds after Segment 09 starts. Function 04 lasts 45 seconds. Interrupt Function 33 when Function 04 occurs. Function 04 cannot occur concurrently with Functions 25, 26, 57, or 65.	3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 16, 25, 26, or 57.	
	Continued...		Continued...	Continued...	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ-AA)****\* SEGMENT 09 Contour Flight (Mission Change) [Cont.]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	300 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 01 when Function 60 occurs.		Start Function 16 600 seconds after Segment 09 starts. Interrupt Function 33 when Function 16 occurs. Function 16 lasts 74.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	
	5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, or 26.		Start Function 47 when Function 16 ends. Function 47 lasts 85 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ-AA)****\* SEGMENT 10 Contour Flight (Mission Change) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 16, 18, or 60.	Start Segment 10 with Function 02. Function 02 lasts until end of segment. Interrupt Functions 03, 18, or 60 occur.  Start Function 17 concurrently with Function 02. Function 17 lasts 900 seconds.	Start Function 46 60 seconds after Segment 10 starts. After 32.5 seconds, interrupt Function 46 for 240 seconds. Function 46 lasts 85.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.  1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 16, 25, 26, or 65.  3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 16, 25, 26, or 57.	Start Segment 10 with Function 34. Function 34 lasts until end of segment. Interrupt Functions 04, 16, 25, 26, 46, 47, 57, and 65 occur.  Start Function 17 concurrently with Function 34. Function 17 lasts 900 seconds.
	5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, or 60.		Start Function 04 500 seconds after Segment 10 starts. Function 04 lasts 45 seconds. Interrupt Function 34 when Function 04 occurs. Function 04 cannot occur concurrently with Functions 25, 26, 57, or 65.	Continued...	Continued...

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ-AA)****\*SEGMENT 10 Contour Flight (Mission Change) [NVG]  
[Continued]**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	300 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 01 when Function 60 occurs.		Start Function 16 600 seconds after Segment 10 starts. Interrupt Function 34 when Function 16 occurs. Function 16 lasts 74.5 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	
	5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, or 26.		Start Function 47 when Function 16 ends. Function 47 lasts 85 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ-AA)****\* SEGMENT 11 Approach**

PILOT			COPLOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 11 with Function 05. Function 05 lasts 4.5 seconds.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.	Start Function 17 concurrently with Function 05. Function 17 lasts until end of segment.	Start Segment 11 with Function 27. Function 27 lasts 13 seconds.	6 times during the segment, randomly select (.50) Function 25 or Function 26.	Start Function 17 concurrently with Function 27. Function 17 lasts until end of segment.
Start Function 51 when Function 05 ends. Function 51 lasts 240 seconds. Interrupt Function 51 when Function 03, 18, or 58 occurs.	1 time during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 05, 18, 25, 26, or 58.		Start Function 21 when Function 27 ends. Function 21 lasts 39 seconds.	Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 05, 21, 27, or 58.	
	2 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 05, 25, 26, or 58.			1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 21, 25, 26, 27, or 65.	
	Continued...			2 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 21, 25, 26, 27, or 57.	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ-AA)****\*SEGMENT 11 Approach [Continued]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
	70 times during the segment, randomly select Function 58. Function 58 lasts 1 second and cannot occur concurrently with Functions 03, 05, 18, 25, or 26. Interrupt Function 51 when Function 58 occurs.				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ-AA)****\*SEGMENT 12 Landing**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 12 with Function 63. Function 63 lasts 3 seconds.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.	Start Function 17 concurrently with Function 63. Function 17 lasts until end of segment.	4 seconds after Segment 12 begins, start Function 29. Function 29 lasts 120 seconds.	3 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Function 27 or 63.	Start Segment 12 with Function 17. Function 17 lasts until end of segment.
Start Function 29 when Function 63 ends. Function 29 lasts 120 seconds.					
Start Function 11 when Function 29 ends. Function 11 lasts 13.5 seconds.					
Start Function 19 when Function 11 ends. Function 19 lasts 8 seconds.			Start Function 11 when Function 29 ends. Function 11 lasts 13.5 seconds.		
			Start Function 19 when Function 11 ends. Function 19 lasts 13.5 seconds.		

\* Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ-AA)****\*SEGMENT 13 Approach [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 13 with Function 06. Function 06 lasts 5.5 seconds.  Start Function 52 when Function 06 ends. Function 52 lasts 340 seconds. Interrupt Function 52 when Function 03, 18, or 58 occurs.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.  1 time during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 06, 18, 25, 26, or 58.  2 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 06, 25, 26, or 58.	Start Function 17 concurrently with Function 06. Function 17 lasts until end of segment.	Start Segment 13 with Function 27. Function 27 lasts 13 seconds.  Start Function 21 when Function 27 ends. Function 21 lasts 39 seconds.	6 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 06, 21, 27, or 58.  1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 21, 25, 26, 27, or 65.  2 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 21, 25, 26, 27, or 57.	Start Function 17 concurrently with Function 27. Function 17 lasts until end of segment.

\*Denotes segment that occurs in more than one mission phase.



**PHASE 9 Enroute (PZ-AA)**      **\* SEGMENT 13 Approach [NVG] [Continued]**

PILOT		COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	20 times during the segment, randomly select Function 58. Function 58 lasts 1 second and cannot occur concurrently with Functions 03, 06, 18, 25, or 26. Interrupt Function 52 when Function 58 occurs.			

\*Denotes segment that occurs in more than one mission phase.

**PHASE 9 Enroute (PZ-AA)****\* SEGMENT 14 Landing [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Segment 14 with Function 64. Function 64 lasts 4 seconds.	Insert Function 25 each time the Copilot performs Function 25 and Function 26 each time the Copilot performs Function 26.	Start Function 17 concurrently with Function 64. Function 17 lasts until end of segment.	4 seconds after Segment 14 begins, Start Function 32. Function 32 lasts 220 seconds.	3 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Function 27 or 64.	Start Segment 14 with Function 17. Function 17 lasts until end of segment.
Start Function 32 when Function 64 ends. Function 32 lasts 220 seconds.			Start Function 27 concurrently with Function 32. Function 27 lasts 13 seconds.		
Start Function 12 when Function 32 ends. Function 12 lasts 44 seconds.			Start Function 12 when Function 32 ends. Function 12 lasts 44 seconds.		
Start Function 19 when Function 12 ends. Function 19 lasts 8 seconds.			Start Function 19 when Function 12 ends. Function 19 lasts 8 seconds.		

\*Denotes segment that occurs in more than one mission phase.

PHASE 8 Enroute (FARP-PZ)\* SEGMENT 23 NOE Flight [NVG] [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 02 when Function 60 occurs.			

\*Denotes segment that occurs in more than one mission phase.

**PHASE 8 Enroute (FARP-PZ)****\* SEGMENT 24 NOE Flight (Threat)**

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
<p>Start Function 41 500 seconds after Segment 24 starts. Function 41 lasts 36 seconds and cannot occur concurrently with Functions 03, 25, 26, or 60. Interrupt Function 01 when Function 41 occurs.</p>	<p>15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 18, 28, 41, or 60.</p> <p>5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, 41, or 60.</p>	<p>Start Segment 24 with Function 01. Function 01 lasts until end of segment. Interrupt Function 01 when Function 03, 18, 41, or 60 occurs.</p> <p>Start Function 17 concurrently with Function 01. Function 17 lasts 700 seconds.</p>	<p>Start Function 41 when Function 41 occurs for the pilot. Interrupt Function 33 when Function 41 occurs. Function 41 lasts 36 seconds and cannot occur concurrently with Functions 18, 25, 26, 57, or 65.</p> <p>Start Function 28 when Function 41 ends. Function 28 lasts 31 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65.</p>	<p>Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26.</p> <p>1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 04, 25, 26, 28, 41, or 65.</p> <p>3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 04, 25, 26, 41, or 57.</p>
<p>Start Segment 24 with Function 24. Function 24 lasts until the end of segment. Interrupt Function 33 when Functions 04, 25, 26, 28, 41, 57, or 65 occur.</p> <p>Start Function 17 concurrently with Function 33. Function 17 lasts 700 seconds.</p>				

\*Denotes segment that occurs in more than one mission phase.

**PHASE 8 Enroute (FARP-PZ)**      **\* SEGMENT 24 NOE Flight (Threat)** [Continued]

PILOT			COPILOT	
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)
	<p>5 times during the segment, randomly select Function 18. Function 18 lasts 3.5 seconds and cannot occur concurrently with Functions 03, 25, 26, 41, or 60.</p> <p>100 times during the segment, randomly select Function 60. Function 60 lasts 1 second and cannot occur concurrently with Functions 03, 18, 25, or 26. Interrupt Function 01 when Function 60 occurs.</p>		<p>Start Function 04 600 seconds after Segment 24 starts. Function 04 lasts 45 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65. Interrupt Function 33 when Function 04 occurs.</p>	

\*Denotes segment that occurs in more than one mission phase.

**PHASE 8 Enroute (FARP-PZ)**      **\* SEGMENT 25 NOE Flight (Threat) [NVG]**

PILOT			COPILOT		
DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS	DISCRETE (FIXED)	DISCRETE (RANDOM)	CONTINUOUS
Start Function 42 500 seconds after Segment 25 starts. Function 42 lasts 46 seconds and cannot occur concurrently with Functions 03, 25, 26, or 60. Interrupt Function 02 when Function 42 occurs.	15 times during the segment, randomly select (.50) Function 25 or Function 26. Functions 25 and 26 last 7 seconds each and cannot occur concurrently with Functions 03, 18, 28, 42, or 60. 5 times during the segment, randomly select Function 03. Function 03 lasts 10.5 seconds and cannot occur concurrently with Functions 18, 25, 26, 42, or 60.	Start Segment 25 with Function 02. Function 02 lasts until end of segment. Interrupt Function 02 when Function 03, 18, 42, or 60 occurs. Start Function 17 concurrently with Function 02. Function 17 lasts 700 seconds.	Start Function 42 when Function 42 occurs for the pilot. Interrupt Function 34 when Function 42 occurs. Function 42 lasts 46 seconds and cannot occur concurrently with Functions 25, 26, 57, or 65. Start Function 28 when Function 42 ends. Function 28 lasts 31 seconds and cannot occur concurrently with Functions 25, 26, 28, 34, 57, or 65.	Insert Function 25 each time the pilot performs Function 25 and Function 26 each time the pilot performs Function 26. 1 time during the segment, randomly select Function 57. Function 57 lasts 10.5 seconds and cannot occur concurrently with Functions 04, 25, 26, 28, 42, or 65. 3 times during the segment, randomly select Function 65. Function 65 lasts 3.5 seconds and cannot occur concurrently with Functions 04, 25, 26, 28, 42, or 57.	Start Segment 25 with Function 34. Function 34 lasts until the end of segment. Interrupt Function 34 when Functions 04, 25, 26, 28, 42, 57, or 65 occur. Start Function 17 concurrently with Function 34. Function 17 lasts 700 seconds.
	Continued...		Continued...		

\*Denotes segment that occurs in more than one mission phase.